EPA Reg. Jacket 83100-27 vol 1

# Material to be added to an e-Jacket/Jacket

Reg. #	83100-27	Decision # 439 80/
Description:	Initial	registration
1. Placen	nent within the e-Jacket/jac	cket:
J	Default: (chronologica	I, top = newest)
	File Location: (eg. "be	fore page 45 in .pdf")
2. Send	to Data Extraction contract  Newly stamped accomplished in the Notification  New CSF  Other:	
organize	d and clipped together, NC	the material or jacket. It must be well OT STAPLED. Then give the material with nation Services Center (Room S-4900).
Reviewe	er: Tom Harris	Division: RD
Phon	e: 308-9423	Date: 4/5///



reg notices: methomyl 83100-27, 83100-28

Thomas Harris o Frank Sobotka

04/05/2011 05:11 PM

Dr. Sobotka,

Attached please find the registration notice and stamped labels for two Rotam methomyl end-use products. Thanks for your assistance in providing information as needed and revising the labels in a timely manner. I'll send the reviews in a separate email tomorrow; I'm still waiting for a copy of one review.

83100-27

F

083100-0027.20110405.reg notice stamped label.ac.ocr.pdf

83100-28



083100-0028.20110405.reg notice stamped label.ac.ocr.pdf

Tom Harris EPA/OCSPP/OPP/RD/IRB voice: (703) 308-9423 fax: (703) 308-0029 harris.thomas@epa.gov

visit http://www.epa.gov/pesticides



#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505C) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460

NOTICE OF PESTICIDE:

x Registration
Reregistration
(under FIFRA, as amended)

EPA Reg. Number: Date of Issuance:

April 5, 2011

83100-27

Date of Expiration:

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Term of Issuance:

conditional

Name of Pesticide Product:

Rotam Methomyl 29LV Insecticide

Name and Address of Registrant (include ZIP Code):

Rotam Agrochemical Company, Ltd. c/o IPM Resources LLC (agent) 4032 Crockers Lake Blvd., Suite 818 Sarasota, FL 34238

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2. Make the following label changes before you release the product for shipment:
  - a. Add the phrase "EPA Registration Number 83100-27".
- 3. Per the indicated EPA Guidelines, submit the following within the months indicated as measured from the effective date of this registration.
  - a. One year storage stability (830.6317) (measurements at 0, 3, 6, 9, and 12 months). Submit in both electronic and hard copy format. Due within 18 months.
  - b. Corrosion characteristics (830.6320) (measurements at 0, 3, 6, 9, and 12 months). Submit in both electronic and hard copy format. Due within 18 months.
- 4. Submit two (2) copies of the final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A copy of the label stamped "accepted with comments" is enclosed for your records. If you have any questions, please contact Tom Harris at (703) 308-9423 or harris.thomas@epa.gov. enclosure

Signature of Approving Official:

Date:

APR - 5 2011

Thomas C. Harris

Insecticide Rodenticide Branch Registration Division (7505P)

EPA Form 8570-6

4

### RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP 1A INSECTICIDE

### Rotam Methomyl 29LV Insecticide

Water Soluble Liquid Contains 2.4 lbs. active ingredient p	er gallon	ACCEPTED
Active Ingredient	By Weight	With COMMENTS In EPA Letter Dated:
Methomyl (S-methyl-N-[(methylcarbamoyl) oxy]thioacetimidate)	29%	APR - 5 2011 Under the Federal Insecticide, Fungicide and Rodenticide Act, As amended, for the pesticide Registered under EPA Reg. No:
Other Ingredients	71%	83100-27
TOTAL Contains Methonol	100%	

[Placeholder to identify Container type]

EPA Reg. No. 83100 - 27 EPA Est. No.: 5905-GA-01

# DANGER POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional Precautionary Statements on inside booklet and back panel of container and Directions for Use on inside booklet.

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826 Net Contents
Gallons
TBA

#### **PULL HERE TO OPEN▶**

### RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP

1A

INSECTICIDE

### Rotam Methomyl 29LV Insecticide

# KEEP OUT OF REACH OF CHILDREN DANGER POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### Water Soluble Liquid

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient	By Weight
Methomyl	
(S-methyl-N-[(methylcarbamoyl) oxy]thioacetimidate)	29%
Other Ingredients	71%
TOTAL Contains Methanol	100%

[Placeholder to identify Container type]

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826 Net Contents
Gallons
TBA

Refer to inside for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations, Engineering Controls Statements, Environmental Hazards and Directions for Use

## FIRST AID (N-Methyl Carbamate insecticide)

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

**POISONING SYMPTOMS** — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section and seek medical attention at once.

#### **NOTE TO PHYSICIAN**

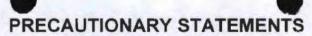
Probable mucosal damage may contraindicate the use of gastric lavage.

**TREATMENT** — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact the National Poison Control Center 24-hr Emergency Hotline at: 1-800-222-1222.



HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# KEEP OUT OF REACH OF CHILDREN

DANGER

POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Restricted Use Pesticide due to toxicity categories. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Contains Methanol. Methanol may cause blindness. Causes irreversible eye damage. May be fatal if swallowed or if inhaled. Harmful if absorbed through skin. Do not get in eyes or on clothing. Do not breathe spray mist. Avoid contact with skin.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, cleaners, repairers of application equipment, and others exposed to the concentrate must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as natural rubber or other materials in EPA category C.
- Socks and chemical resistant footwear.
- Protective evewear.
- Chemical resistant apron.
- Respirator with either an organic vapor-removing cartridge with a prefilter
  approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a
  canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G),
  or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister
  with any R, P, or HE prefilter.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENGINEERING CONTROL STATEMENTS**

Human flaggers must be in enclosed cabs.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must not assist in the mixing and loading operations.

### USER SAFETY RECOMMENDATIONS USERS SHOULD:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- · Remove personal protective equipment immediately after handling this product.
- Wash the outside of gloves before removing.
- · As soon as possible, wash thoroughly and change into clean clothing.
- · Remove and wash contaminated clothing before reuse.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean highwater mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

#### PHYSICAL AND CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation. The product shows potential explosive properties when heated to elevated temperatures.

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# DIRECTIONS FOR USE Restricted Use Pesticide

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). REI Summary: REI peaches = 4 day; REI apple, cotton, grapefruit, lemon, nectarine, orange, tangelo, tangerine = 3 day; all other WPS uses = 48 hour REI.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls.

Chemical-resistant gloves, such as barrier laminate or butyl rubber.

Shoes plus socks.

Protective eyewear.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Do not formulate this product into other end-use products without written permission from Rotam.

ROTAM METHOMYL 29LV insecticide should be used only in accordance with directions for use on this label or in separate Rotam supplemental labeling. Rotam will not be responsible for use of the product in a manner not specified by Rotam in the product's labeling and User assumes all risk for such use.

ROTAM METHOMYL 29LV is a water soluble liquid that is applied by foliar application to control many important insect pests. ROTAM METHOMYL 29LV is mixed with water for application.

Do not apply thru Drip Chemigation unless accompanied by Rotam Supplemental Labeling.

Pilots must not assist in the mixing and loading operations.

Do not apply by ground equipment within 25 feet, or by air within 100 feet of lakes, reservoirs, rivers, estuaries, commercial fish ponds and natural, permanent streams, marshes or natural, permanent ponds. Increase the buffer zone to 450 feet from the above aquatic areas when ultra low volume application is made.

Hand-held equipment is prohibited for applications to crops. This product must be applied to crops only with mechanical ground, overhead sprinkler chemigation or aerial application equipment.

Use only in commercial and farm plantings. Not for use in home plantings. Not for use during any period after a commercial crop site is opened for public entry as a "U-Pick", "Pick Your Own" or similar operation; in no case shall preharvest applications be made after first public entry. The restricted entry interval and preharvest interval for the crop stated elsewhere on this label must be followed.

#### **RESISTANCE MANAGEMENT**

For resistance management, ROTAM METHOMYL 29LV insecticide is a group 1A insecticide. Repeated and exclusive use of ROTAM METHOMYL 29LV or other group 1A insecticides may lead to the build-up of resistant strains of insects in some crops. Not all members of this group have been shown to be cross-resistant. Different resistance mechanisms that are not linked to target site of action, such as enhanced metabolism, are common for this group of chemicals. Alternation of compounds from different sub-groups within this group may be an acceptable part of an integrated pest management program.

Some insects are known to develop resistance to products used repeatedly for control. When this occurs, the recommended dosages fail to suppress the pest population below the economic threshold. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at <a href="http://www.irac-online.org">http://www.irac-online.org</a>.

#### INTEGRATED PEST MANAGEMENT

This product should be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult

your state cooperative extension service, professional consumants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

#### SCOUTING

Monitor insect populations to determine whether or not there is a need for application of ROTAM METHOMYL 29LV based on locally determined economic thresholds. More than one treatment of ROTAM METHOMYL 29LV may be required to control a population of pests.

#### **BENEFICIAL ARTHROPODS**

ROTAM METHOMYL 29LV at rates of 2/5 to 3/4 pint per acre helps conserve certain beneficials, including big-eyed bugs, damsel bugs, flower bugs and spiders in cotton and soybeans. While these beneficials cannot be relied upon to control pests, they are of potential value and should be monitored along with pests in pest management programs on these crops.

#### SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying ROTAM METHOMYL 29LV.

Fill spray tank 1/4 to 1/2 full of water. Add ROTAM METHOMYL 29LV directly to spray tank. Mix thoroughly. Use mechanical or hydraulic means; do not use air agitation. Spray mix should not be stored overnight in spray tank.

Compatibility — Since formulations may be changed and new ones introduced, in this situation users can premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.) before applying the product. Avoid mixtures of several materials and very concentrated spray mixtures.

Do not use ROTAM METHOMYL 29LV with Bordeaux mixture (copper sulfate and hydrated lime), Du Ter triphenyltin hydroxide, lime sulfur, Rayplex iron nor in highly alkaline solutions. Use mildly alkaline mixtures immediately after mixing to prevent loss of insecticidal activity.

Tank Mix Sequence – Add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after addition of each product.

- Water soluble bags.
- 2. Water dispersible granules.
- 3. Wettable powders.
- 4. Water based suspension concentrates.
- ROTAM METHOMYL 29LV and other water soluble concentrates.
- 6. Oil based suspension concentrates.
- 7. Emulsifiable concentrates.
- 8. Adjuvants, surfactants, oils, soluble fertilizers, and drift retardants. Follow local practice and manufacturer's recommendation.

#### **APPLICATION**

Apply at the recommended rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Follow-up treatments of ROTAM METHOMYL 29LV should be applied, as needed, to keep pest populations within threshold limits. On most crops, ROTAM METHOMYL 29LV should be applied at 5 to 7 day intervals to maintain control. Refer to crop specific directions for use in the crop tables for more specific information on treatment intervals.

Use sufficient water to obtain thorough, uniform coverage. Since ROTAM METHOMYL 29LV is a fast acting contact insecticide, best results follow direct spraying of the target insect.

For aerial, use a minimum of 2 gals. per acre (gpa) except 10 gpa for peaches and nectarines; 15 gpa for oranges, lemons, grapefruit, tangelos and tangerines.

ROTAM METHOMYL 29LV is recommended for use as a low volume aerial spray 0.53 gpa (2L) for cotton\* and soybeans\* and 1 gpa for the crops listed below providing the following conditions are met:

- -equipment is adjusted to distribute spray uniformly over the spray swath,
- wind conditions and other factors such as temperature and humidity are such
- -that the spray is delivered to the target area,
- -local regulations do not prohibit low-volume aerial sprays,
- -use rates are applied as directed on the package label or supplemental labeling for the following crops:

Peas (succulent) Alfalfa Celery Collards Peppermint Anise Corn Peppers Asparagus Barley Cotton Potato Beans Cucumber Rye Broccoli Lettuce Soybean Brussels sprouts Melons Spinach Cabbage Mint Sugar beet Summer Squash Carrot Oats Wheat Cauliflower Peanuts

Apply the low rates on small plants, small insects and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use 1 to 3 applications of the highest recommended rate for controlling severe infestations. Thereafter, use the lowest rate possible to maintain control.

#### SPRAY TANK CLEANOUT

Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

<sup>\*</sup> Not Registered for aerial application in a diluted volume of less than 1 gal in CA.

CHEMIGATION

Instructions for the Use of ROTAM METHOMYL 29LV on Alfalfa, Barley, Oats, Green and Dry Bulb Onions, Potatoes, Rye, Sugar Beets and Wheat Using Overhead Sprinkler Chemigation

Do not apply thru Drip Chemigation unless accompanied by Rotam Supplemental Labeling.

Chemigation: Overhead sprinkler chemigation is allowed for use in alfalfa, barley, succulent and dry beans, oats, onions, succulent peas, potatoes, rye, sugar beets, sweet corn and wheat. Do not apply this product through any other type of irrigation systems, except those allowed by instructions provided in supplemental labeling.

Overhead chemigation applications offer the advantage of greater penetration and coverage of the target plant. However, typical chemigation applications are more dilute than ground or aerial applications. For best results, it is recommended to keep the concentration of ROTAM METHOMYL 29LV as high as possible in the application. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre.

ROTAM METHOMYL 29LV is most active as a contact insecticide, although it does also have activity via ingestion of treated plants. For best results, applications of ROTAM METHOMYL 29LV should take place when the insects are active and most likely to come into direct contact with the application.

Types of Irrigation Systems:

ROTAM METHOMYL 29LV may be applied through overhead sprinkler irrigation systems for control of various pests. The irrigation system used must provide uniform water distribution. Do not use filter screens smaller than 50 mesh throughout the system, due to possible build up of material on 100 mesh or smaller screens. Do not apply ROTAM METHOMYL 29LV through any other type of irrigation systems, except those allowed by instructions provided in a supplemental, SLN, or this product label.

## General Directions for Chemigation: Preparation

A pesticide tank is recommended for the application of ROTAM METHOMYL 29LV in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Add 1/4 to 1/2 of the desired amount of water and then measure the required amount of ROTAM METHOMYL 29LV into the tank. Complete filling the tank by adding the required amount of water. Agitate thoroughly to insure a uniform solution of ROTAM METHOMYL 29LV. Once in solution, no further agitation is required. Injection solution should not be stored overnight. Highly alkaline water should be buffered so that the pH of the spray solution is in the range of neutral to slightly acidic (pH5-7).

Injection Into Chemigation Systems

Inject the proper amount of the ROTAM METHOMYL 29LV solution into the irrigation water flow using a positive displacement injection pump. Injection should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water.

#### **Uniform Water Distribution**

The irrigation system used for application of ROTAM METHOMYL 29LV must provide for uniform distribution of ROTAM METHOMYL 29LV treated water. Non-uniform distribution might result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.

#### Equipment calibration

Calibrate the irrigation system and injector before applying ROTAM METHOMYL 29LV. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, you should contact your state extension service specialists, equipment manufacturer or other experts.

#### **Monitoring of Chemigation Applications**

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for cleaners and repairers of application equipment when making adjustments or repairs on the chemigation system when ROTAM METHOMYL 29LV is in the irrigation water.

#### Required System Safety Devices

Do not connect any irrigation system used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

7. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction.

There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

#### Posting of Areas to be Treated

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any other public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to all the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The signs shall be printed in ENGLISH. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color, which sharply contrasts with their immediate background. At the top of the sign shall be the words "KEEP OUT", followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word "STOP". Below the symbol shall be the words "PESTICIDE IN IRRIGATED WATER".

Posting for chemigation does not replace other posting and reentry requirements for farm worker safety.

#### Operation

Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injection system according to the directions above. This procedure is necessary to deliver the desired rate per acre in a uniform manner. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system. End guns must be turned off during the application, if they irrigate nontarget areas or if they do not provide uniform application and coverage.

Nozzles in the immediate area of control panels, chemical supply tanks, wellheads and system safety devices must be plugged to prevent contamination of these areas.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Do not apply when system connections or fittings leak or when nozzles do not provide uniform distribution.

Cleaning the System

Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner's manual or your local equipment dealer for cleanout procedures for your injection system.

#### SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

 The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the <u>Aerial Drift Reduction Advisory Information</u>.

## AERIAL DRIFT REDUCTION ADVISORY INFORMATION Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

#### **Controlling Droplet Size - General Techniques**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle.
   Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### Controlling Droplet Size - Aircraft

 Number of Nozzles - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.

- Nozzle Orientation Orienting nozzles so that the spray is released parallel
  to the airstream produces larger droplets than other orientations and is the
  recommended practice. Significant deflection from horizontal will reduce
  droplet size and increase drift potential.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types and the lowest drift.
- Boom Length For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- Application Height Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
- Swath Adjustment When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downward edges of the fields, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

#### **BOOM HEIGHT**

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. AVOID GUSTY OR WINDLESS CONDITIONS.

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### **TEMPERATURE AND HUMIDITY**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### **TEMPERATURE INVERSIONS**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### **SENSITIVE AREAS**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

### AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

**Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

#### AIR ASSISTED (AIR BLAST) TREE AND VINE SPRAYERS

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides. In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift...

Adjust deflectors and aiming devices so that spray is only directed into the canopy.

Block off upward pointed nozzles when there is no overhanging canopy.

Use only enough air volume to penetrate the canopy and provide good coverage.

Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Alfalfa	Pea Aphid Lygus Bugs Blotch Leafminer Aphids Egyptian Alfalfa Weevil Larvae Loopers Beet Armyworm Armyworm Alfalfa Caterpillar Fall Armyworm Western Yellowstriped Armyworm Yellowstriped Armyworm	1 1/2 – 3	7 *	48 hrs
	Alfalfa Weevil Larvae	3		13 18
	Variegated Cutworm	3/4 - 3		
	*Do not apply within 7 days of cutting or a	allowing livestock to	graze.	
Anise (Fennel)	Cabbage Looper	3	7	48 hrs
Anise (Fennel)	Cabbage Looper  Beet Armyworm  Do not apply more than 15 pints of R	1 1/2 - 3		48 hrs

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Apple Ground application only	Apple Aphid Rosy Apple Aphid Tufted Apple Budmoth Green Fruitworm Tarnished Plant Bug	1 1/2 - 3 *	14	72 hrs
	Codling Moth (10-12 day spray intervals)			E LE
	Leafrollers (Fruit-tree, Obliquebanded, Redbanded, Variegated) Lesser Appleworm White Apple Leafhopper Tentiform Leafminer Cutworm	3 *		
	Do not use on Early Macintosh & V Do not apply more than 15 pints of Do not make more than 5 application treatments is 7 days.  * Apply in a minimum of 50 gallons	ROTÂM METHOMY ons per crop; minimu		
Asparagus	Beet Armyworm Western Yellowstriped Armyworm Asparagus Beetle Spotted Asparagus Beetle White Cutworm Redbacked Cutworm	1 1/2 - 3	1	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 15 pints of Do not make more than 8 application		'L 29LV per acre per crop.	
Avocado	Western Avocado Leafroller Omnivorous Looper	1 1/2 - 3	1	48 hrs
	Do not apply more than 3 pints of F Do not make more than 2 application		. 29LV per acre per crop.	

Insects	ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
Do not apply more than 6 pints of F Do not make more than 4 applications Chemigation: ROTAM METHOMY chemigation. For best results, use 29LV. Apply in 0.1 to 0.2 inches of more information.  *Cereal leaf beetle: ROTAM METH cereal leaf beetle eggs when applied be timed to correspond with the apegg hatch to achieve maximum ovicurrently registered in California.  **Aphids: For aphid control, crop madverse environmental conditions (	per crop. 'L 29LV may be applithe highest listed rate water per acre. See IOMYL 29LV can proved according to label pearance of newly lacidal effect. Use on the last be actively grow (such as, extreme te	lied by overhead sprinkler e of ROTAM METHOMYL CHEMIGATION section for  ovide contact ovicidal effect on directions. Application should aid eggs or in anticipation of this pest stage (egg) is not  ing and not under stress from mperatures or drought).	
Leafhopper Mexican Bean Beetle	3/4 – 3	Succulent Beans - 3/4 - 1 1/2 pts 1, over 1 1/2 pts 3;	48 hrs
Fall Armyworm	1 1/2	7 - Hay	
Beet Armyworm Corn Earworm Saltmarsh Caterpillar Yellowstriped Armyworm Western Yellowstriped Armyworm Lygus Bugs Thrips Aphids Loopers*	1 1/2 - 3		
European Corn Borer (Ovicide & Larvicide) Initiate when moth flights first appear and-continue preventive treatments at 3-4 day intervals To control eggs and larvae			
Spotted Cucumber Beetle	3/4 - 1 1/2		
	Cereal Leaf Beetle* Aphids**  Do not apply more than 6 pints of FDo not make more than 4 applications Chemigation: ROTAM METHOMY chemigation. For best results, use 29LV. Apply in 0.1 to 0.2 inches of more information.  *Cereal leaf beetle: ROTAM METHORY cereal leaf beetle eggs when applie be timed to correspond with the apegg hatch to achieve maximum ovicurrently registered in California.  **Aphids: For aphid control, crop madverse environmental conditions Applications on Russian wheat aphications on Russian wheat aphications on Russian wheat aphications on Russian wheat aphications applications on Russian wheat aphications on Russian wheat aphic	Armyworms Cereal Leaf Beetle* Aphids**  Do not apply more than 6 pints of ROTAM METHOMYD on the make more than 4 applications per crop. Chemigation: ROTAM METHOMYL 29LV may be applications. For best results, use the highest listed rat 29LV. Apply in 0.1 to 0.2 inches of water per acre. See more information.  *Cereal leaf beetle: ROTAM METHOMYL 29LV can proceed leaf beetle eggs when applied according to label be timed to correspond with the appearance of newly leeg hatch to achieve maximum ovicidal effect. Use on currently registered in California.  **Aphids: For aphid control, crop must be actively grow adverse environmental conditions (such as, extreme te Applications on Russian wheat aphid need to begin white (<10 adults per stem).    Salt Armyworm	Armyworms Cereal Leaf Beetle* Aphids*** Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 4 applications per crop. Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  **Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.  **Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought). Applications on Russian wheat aphid need to begin when the aphid population is low (<10 adults per stem).    3/4 - 3

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Beans (Dry) (Same as Succulent Beans)	(Same as Succulent Beans)	(Same as Succulent Beans)	14 - Dry Beans * 14 - Vines * 14 - Hay *	48 hrs
	Do not apply more than 15 p Do not make more than 10 a Do not use for Loopers in A *Do not apply within 14 days	applications per crop. L & GA.	OMYL 29LV/acre /crop.	
Beets (Table)	Imported Cabbageworm	3/4 – 3	0 - roots	48 hrs
	Beet Armyworm Cabbage Looper Diamondback Moth	1 1/2 - 3	10 -tops	
	Cucumber Beetle Variegated Cutworm	1 1/2		
	Do not apply more than 12 p Do not make more than 8 a		OMYL 29LV per acre per crop.	
Bermudagrass pasture	Fall Armyworm Armyworm Striped Grass Looper	3/4 - 3	7 - Forage * 3 - Dehydrated Hay **	48 hrs
	Do not apply more than 3 pi Do not make more than 4 at * Do not apply within 7 days ** Do not apply within 3 day	oplications per crop. of feeding forage or al	MYL 29LV per acre per crop.  lowing livestock to graze.	
Blueberries	Do not apply within 5 day	s of cutting for may.		1
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil	1 1/2	3	48 hrs
Blueberries	Blueberry Leafhopper Aphids Tussock Moth		3	48 hrs
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil Sharp-Nosed Leafhopper Cranberry Fruitworm*	1 1/2	3	48 hrs
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil Sharp-Nosed Leafhopper Cranberry Fruitworm* Cherry Fruitworm* Flea Beetle (larvae) Sawfly (larvae)	1 1/2	3	48 hrs
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil Sharp-Nosed Leafhopper Cranberry Fruitworm* Cherry Fruitworm* Flea Beetle (larvae) Sawfly (larvae) Blueberry Leafroller Blueberry Maggot  Do not apply during bloom.	1 1/2 - 3 3 3/4-1 1/2  Dints of ROTAM METHOR	OMYL 29LV per acre per crop. Do	48 hrs
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil Sharp-Nosed Leafhopper Cranberry Fruitworm* Cherry Fruitworm* Flea Beetle (larvae) Sawfly (larvae) Blueberry Leafroller Blueberry Maggot  Do not apply during bloom. Do not apply more than 12 pot make more than 4 applie	1 1/2 - 3 3 3/4-1 1/2  Dints of ROTAM METHOR		48 hrs

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Brussels Sprouts	Loopers Imported Cabbageworm Diarnondback Moth	1 1/2 – 3 **	3	48 hrs
	Variegated Cutworm	1 1/2 **		100
		pints of ROTAM METHON applications per crop; mini	IYL 29LV per acre per crop. mum interval between	
Cabbage	Loopers * Diamondback Moth Fall Armyworm	1 1/2 - 3 **	1	48 hrs
	Imported Cabbageworm	3/4 - 3 **		
	Variegated Cutworm	1 1/2 **		
		AL & GA.  approve coverage.	IYL 29LV per acre per crop. interval between treatments is 2	
Carrot	Beet Armyworm Armyworms Aster Leafhopper	1 1/2 - 3	1	48 hrs
	Variegated Cutworm	3/4 - 1 1/2		
	Do not apply more than 21 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 10 applications per crop.			
Cauliflower	Imported Cabbageworm	3/4 – 3 **	3	48 hrs
	Loopers Diamondback Moth	1 1/2 – 3 **		
	Variegated Cutworm	1 1/2 **		
	Do not apply more than 24 Do not make more than 10 treatments is 2 days.  ** Add a wetting agent to in	applications per crop; mini	IYL 29LV per acre per crop. mum interval between	
Celery	Beet Armyworm Aster Leafhopper	1 1/2 – 3	7	48 hrs
	Loopers	3		
	Variegated Cutworm	1 1/2		
	Armyworms	3/4 - 3		
	Do not apply more than 24 Do not make more than 10		IYL 29LV per acre per crop.	
Chicory	Beet Armyworm Variegated Cutworm Leafhoppers	1 1/2 - 3	80	48 hrs
	Do not apply more than 6 p Do not make more than 2 a		/L 29LV per acre per crop.	

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Chinese Cabbage	Loopers Beet Armyworm	1 1/2 - 3*	10	48 hrs
	Do not apply more than 24 pi Do not make more than 10 a * Minimum of 25 gallons water	pplications per crop.		
Collards (Fresh market only)	Diamondback Moth Variegated Cutworm	1 1/2	10	48 hrs
	Imported Cabbageworm Beet Armyworm Loopers*	1 1/2 - 3		
	Do not apply when temp. is le Do not apply when crop is les Do not apply more than 18 pi Do not make more than 8 app * Do not use for Loopers in A	ss than 10" tall. ints of ROTAM METHON plications per crop.	1YL 29LV per acre per crop.	
Corn (Field, Popcorn & Seed)	Earworm – (Ovicide/Larvicide) Armyworm Fall Armyworm European Corn Borer Ears 1-3 days or as needed Corn Rootworm (adult beetle Flea Beetles Picnic Beetles Aphids	3/4 – 1 1/2	21 - Ears 3 - Forage* 21 - Stover*	48 hrs
	Variegated Cutworm, Beet Armyworm	1 1/2		
	The plants can be fed directly	pplications per crop. y growing plants that are y to animals or used to m after removal of the grai	harvested with the ears intact. take silage. Corn stover are the n at full plant maturity. These	

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
THE RESERVE AND ADDRESS.	EarwormWhorl as needed	1-11/2	0 -Ears	48 hrs
	Fall Armyworm Armyworm Earworm, (Ovicide/Larvicide) European Corn Borer -Ears 1-3 days or as needed Corn Rootworm (adult beetles) Flea Beetles Picnic Beetles Aphids	3/4 – 1 1/2	3 - Forage 21 - Stover	
	Variegated Cutworm Beet Armyworm	1 1/2		
	Do not apply more than 21 pints Do not make more than 28 applie treatments is 1 day.	of ROTAM METHOM cations per crop; minir	YL 29LV per acre per crop. mum interval between	

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Cotton – All US	Ovicide/Larvicide - Bollworm Tobacco Budworm (Initiate schedule when significant numbers of eggs are present Continue at 3 to 5-day intervals while eggs are present and larval control is adequate. If significant larvae survive, use higher rates below.) Lygus Bugs/Plant Bugs (adults and nymphs) Start treatment on low level population for suppression.	2/5 - 3/4 (see Insect Predator Section)	15	72 hrs
	Cotton Leafworm	3/4 - 1 1/2		M (5)
	Cotton Fleahopper (as needed)	2/5 – 3/4		
	Aphids, Thrips	3/4		
East of Rockies only	(Early Season) Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/PlantBugs (adults and nymphs) Use as occasional spray in regular schedule but not more often than every 10 days.	1 1/2		
	(Late Season) Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/Plant Bugs (adult and nymphs) Up to 3 applications at 3-5 day intervals after desired boll load set on plants.	1 1/2 – 2 1/4		
Texas	Cotton Aphid	3/4 – 2		
West of Rockies only	Larvicide for worms: Bollworm Fall Armyworm Tobacco Budworm Lygus Bugs Beet Armyworm	1 1/2 – 2 1/4		
	Cotton Leafperforator	1-21/4		

desired boil load set on plants.  For all applications made to cotton in the United States:  Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.  Do not graze or feed.  Use may redden cotton. If excessive, stop or alternate with other insecticides.			
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Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Cucumber	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pt 1 Over 1 1/2 pt 3	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 18 pint Do not make more than 12 app		YL 29LV per acre per crop.	
Eggplant	Green Peach Aphid	3/4 – 3	5	48 hrs
_ <del></del>	Tomato Pinworm (Ground Application Only) Beet Armyworm Corn Earworm	1 1/2 - 3		
	Do not apply more than 15 pint Do not make more than 10 app		YL 29LV per acre per crop.	
	Beet Armyworm	1 1/2 - 3	10	48 hrs
Endive, Escarole	Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.			
Garlic	Beet Armyworm	1 1/2**	7	48 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 6 applications per crop.  ** Add a wetting agent to improve coverage.			
Grapefruit CA, AZ & HI only	Thrips Fruitree Leafroller Orange Tortrix Western Tussock Moth Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Horseradish (Ground	Aphids Thrips	1 1/2	65	48 hrs
application Only)	Do not apply more than 6 pints Do not make more than 4 appli		L 29LV per acre per crop.	
	STATE OF THE STATE	26		

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Leafy Green Vegetables: Beet (tops) Dandelions, Kale,	Beet Armyworm Cabbage Looper* Diamondback Moth Imported Cabbageworm	1 1/2 - 3	. 10	48 hrs
Mustard Greens, Parsley, Swiss Chard, Turnip Greens	Do not apply more than 12 pin Do not make more than 8 app * Do not use for Cabbage Loo	lications per crop.	IYL 29LV per acre per crop.	
Lemon CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Beet Armyworm	1 1/2 - 3		72 hrs
	Do not apply more than 9 pint		/L 29LV per acre per crop.	
Lentils	Do not make more than 4 app Western Yellowstriped	1 1/2 - 3	21	48 hrs
Lentila	Armyworm			
	Do not apply more than 3 pints Do not make more than 2 app		/L 29LV per acre per crop.	
Lettuce	Alfalfa Looper	3/4 - 3	3/4-1 1/2 pt 7	48 hrs
(Head and Leaf varieties)	Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper	1 1/2 - 3	over 1 1/2 pts. – 10	
	Variegated Cutworm	1 1/2		
	Lettuce (head varieties) Do not apply more than 24 pin Do not make more than 15 applic days. Lettuce (leaf varieties) Do not apply more than 12 pin Do not make more than 8 app treatments is 2 days.	ations per crop; minimum into of ROTAM METHOM	interval between treatments is 2  IYL 29LV per acre per crop.	

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Melons Including: Canteloupe Casaba Santa Claus melon Crenshaw melon Honeydew melon Honey balls Persian melon Golden Pershaw melon	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pts 1 day over 1 1/2 pts 3 days	48 hrs
Mango melon Pineapple melon Snake melon	Variegated Cutworm	1 1/2		4
Watermelon	Do not apply more than 18 pir Do not make more than 12 ap		MYL 29LV per acre per crop.	
Mint (Peppermint,	Variegated Cutworm Alfalfa Looper	3	14	48 hrs
Spearmint)	Flea Beetles	2 1/4 - 3		
The State of the	Do not apply more than 6 pint Do not make more than 4 app		MYL 29LV per acre per crop.	
Nectarine CA & AZ only	Thrips	1 1/2 – 3	The state of the s	72 hrs

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Oats	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.  Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  *Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.  **Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought). Applications on Russian wheat aphid need to begin when aphid population is low (<10 adults per stem).			
Onions	Beet Armyworm	1 1/2 - 3**	7 - Green &	48 hrs
(Green & Dry Bulb)	Thrips* Variegated Cutworm Black Cutworm	3**	Dry Bulb Onions	
	Onions, green  Do not apply more than 18 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop; minimum interval between treatments is 5 days.  Onions, dry bulb  Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop; minimum treatment interval between treatments is 5 days.  *Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation to control thrips. Begin applications before thrips populations reach 3-5 thrips per plant. For best results, use the highest rate of ROTAM METHOMYL 29LV and a wetting agent. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  ** Add a wetting agent to improve coverage.			

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Oranges CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Fruittree Leafroller Beet Armyworm Citrus Cutworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of Do not make more than 4 applic		29LV per acre per crop.	
Peaches	Catfacing Insects (Plant Bugs and Stink Bugs) - begin at petal fall and continue in cover sprays at 7 to 10-day intervals Oriental Fruit Moth* -begin at petal fall; use trapping devices and frequent field inspection to determine need for treatment. Continue treatment in cover sprays and alternate with residual- type insecticides registered for this use. Green Peach Aphid  Do not apply more than 18 pints Do not make more than 6 applic	3 pt (or 3/4 pt per 100 gal up to 400 gal per acre)  of ROTAM METHOMY	L 29LV per acre per crop.	4 days
	* Oriental Fruit Moth (Ground Ap Corn Earworm* Potato Leafhopper		21	48 hrs
	Fall Armyworm  Beet Armyworm	1 1/4 - 3		
Peanuts	Green Cloverworm Velvetbean Caterpillar Cabbage Looper Soybean Looper ** Thrips Granulate Cutworm	1 1/2 – 3		
	Do not apply more than 12 pints Do not make more than 8 applic Do not feed treated vines. * ROTAM METHOMYL 29LV ha **Soybean Looper is difficult to o Use higher rate for severe infest	ations per crop. s ovicidal and larvicida control. Do not apply to	I control on corn earworm.	

Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Green Fruitworm Oblique banded Leafroller	1 1/2 - 3*	7	48 hrs
Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 2 applications per crop.  * Apply in a minimum of 50 gallons of water per acre.			
Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar Variegated Cutworm	1 1/2 - 3	1 - Peas 5 – Forage 14 - Hay	48 hrs
Alfalfa Caterpillar Armyworm Green Cloverworm	3/4 - 3		
Do not make more than 6 appl treatments is 3 days.	lications per crop; min		
Aphids	1 1/2 - 3	30	48 hrs
Do not apply more than 21 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 7 applications per crop.			
Loopers Beet Armyworm Green Peach Aphid Armyworm Fall Armyworm	1 1/2 – 3	3	48 hrs
Variegated Cutworm	3/4 - 1 1/2		
Do not apply more than 15 pin	ts of ROTAM METHO	DMYL 29LV per acre per crop.	
Omnivorous Leafroller	3	14	48 hrs
		VIYL 29LV per acre per crop.	
	Green Fruitworm Oblique banded Leafroller  Do not apply more than 6 pints Do not make more than 2 appl * Apply in a minimum of 50 ga  Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar Variegated Cutworm  Alfalfa Caterpillar Armyworm Green Cloverworm  Do not apply more than 9 pints Do not make more than 6 appl treatments is 3 days. * Do not use for Cabbage Loo  Aphids  Do not apply more than 7 appl Loopers Beet Armyworm Green Peach Aphid Armyworm Fall Armyworm Variegated Cutworm European Corn Borer  Do not apply more than 15 pin Do not make more than 10 appl Omnivorous Leafroller  Do not apply more than 6 pints	Insects    ROTAM METHOMYL 29LV Pts. Per Acre	Insects  ROTAM METHOMYL 29LV Pts. Per Acre  Green Fruitworm Oblique banded Leafroller  Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 2 applications per crop. * Apply in a minimum of 50 gallons of water per acre.  Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar Variegated Cutworm  Alfalfa Caterpillar Armyworm Green Cloverworm  Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 6 applications per crop; minimum interval between treatments is 3 days. * Do not use for Cabbage Loopers in AL & GA.  Aphids  1 1/2 - 3  Do not apply more than 21 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 7 applications per crop.  Loopers Beet Armyworm Green Peach Aphid Armyworm Fall Armyworm Fall Armyworm Variegated Cutworm  Variegated Cutworm  3/4 - 1 1/2  European Corn Borer 3  Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 10 applications per crop.  Omnivorous Leafroller 3  14  Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Potato	Tuberworm* Loopers Aphids Beet Armyworm Leafhoppers Fall Armyworm	1 1/2 – 3	6	48 hrs
	Variegated Cutworm Flea Beetles	1 1/2		
	Do not make more than 10 applications per crop.  Chemigation - ROTAM METHOMYL 29LVmay be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  *Repeat applications of ROTAM METHOMYL 29LV on a 5-7 day schedule, or longer as needed, to control tuber worm populations. An application schedule of effective insecticides with different modes of action may be needed to keep foliar feeding larval populations as low as possible prior to harvest to reduce the risk of larval damage to the tubers. Failure to adequately control tuberworm larvae prior to crop senescence or vine kill increases the risk of tuber damage.			
Rye	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.  Chemigation - ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  *Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.  **Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought). Applications on Russian wheat aphid need to begin when aphid population is low (<10 adults per stem).			

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Sorghum	Sorghum Webworm	1 1/2*	14**	48 hrs
Including: Sudangrass (except Sweet Sorghum)	Sorghum MidgeApply when 50% bloom and 3-5 days later if needed. Fall Armyworm (Budworm) Beet Armyworm Corn Earworm Armyworm	3/4 – 1 1/2*		
	Do not apply more than 3 pints of RO Do not make more than 2 application * Minimum of 10 gallons per acre by ** Do not apply within 14 days of fee	ns per crop. ground or 2 gall	ons per acre by air.	
Soybeans	Green Cloverworm Velvetbean Caterpillar Mexican Bean Beetle Corn Earworm - Light to moderate Infestations	2/5 - 3/4 (see Insect Predator section)	14 - Soybeans 3 - Forage 12 - Hay	48 hrs
	Corn Earworm -  Moderate to severe infestations	3/4 – 1 1/2		
	Soybean Aphid	1/2 – 1		1
	Beet Armyworm Salt Marsh Caterpillar Bean Leaf Beetle Fall Armyworm Thrips Silver Spotted Skipper - Light to moderate infestations	3/4 – 1		
	Silver Spotted Skipper - Moderate to severe infestations	1 – 1 1/2		
	Do not apply more than 4.5 pints of I Do not make more than 3 application		MYL 29LV per acre per crop.	
Spinach	Alfalfa Looper Cabbage Looper Beet Armyworm Fall Armyworm	1 1/2 - 3	7	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply when minimum daily to Do not apply to seedlings less than 3 Do not apply more than 12 pints of F Do not make more than 8 application	3" diameter. ROTAM METHOI		

Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Beet Webworm Flea Beetles Carrion Beetles Beet Armyworm* Aphids* Western Yellowstripe Armyworm*	3/4 - 3	30 - Tops 21- Roots	48 hrs
Variegated Cutworm	1 1/2		
*Chemigation - ROTAM METHON chemigation to control beet armyv For best results, use the highest li	MYL 29LV may be worm, aphids and sted rate of ROTA	western yellowstriped armyworm. AM METHOMYL 29LV. Apply in	
Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pt 1 day over 1 1/2 pt 3 days	48 hrs
Do not make more than 12 applica * Fruit of the Gourd (Cucurbitacea of the fruit is edible cooked or ray	ations per crop. e) family that are w, once picked ca	consumed when immature, 100% annot be stored, has a soft rind	
Thrips Western Tussock Moth Orange Tortrix Beet Armyworm	1 1/2 - 3	1	72 hrs
		MYL 29LV per acre per crop.	
Flea Beetle Hornworm	3/4 – 1 1/2	5 - Flue cured 14 - Air or fire cured	48 hrs
Loopers Aphids Tobacco Budworm Fall Armyworm	1 1/2		
	Beet Webworm Flea Beetles Carrion Beetles Beet Armyworm* Aphids* Western Yellowstripe Armyworm* Variegated Cutworm Do not apply more than 15 pints of Do not make more than 10 applicated armyworm for best results, use the highest life. O.1 to 0.2 inches of water per acressinformation.  Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm  Do not apply more than 18 pints of Do not make more than 12 applicates of the fruit is edible cooked or rate which is easily penetrated and if Thrips Western Tussock Moth Orange Tortrix Beet Armyworm  Do not apply more than 9 pints of Do not make more than 4 applicated ap	Beet Webworm Flea Beetles Carrion Beetles Beet Armyworm* Aphids* Western Yellowstripe Armyworm*  Variegated Cutworm Do not apply more than 15 pints of ROTAM METHOD not make more than 10 applications per crop. *Chemigation - ROTAM METHOMYL 29LV may be chemigation to control beet armyworm, aphids and For best results, use the highest listed rate of ROT. 0.1 to 0.2 inches of water per acre. See CHEMIGA information.  Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm  Do not apply more than 18 pints of ROTAM METHOD not make more than 12 applications per crop. * Fruit of the Gourd (Cucurbitaceae) family that are of the fruit is edible cooked or raw, once picked ca which is easily penetrated and if seeds were han 11/2 - 3 Western Tussock Moth Orange Tortrix Beet Armyworm  Do not apply more than 9 pints of ROTAM METHOD not make more than 4 applications per crop. Flea Beetle Hornworm  Loopers 1 1/2 - 3  Hornworm  Do not apply more than 9 pints of ROTAM METHOD not make more than 4 applications per crop. Flea Beetle Hornworm  Loopers 1 1/2 - 3  Hornworm  Loopers 1 1/2 - 3	Beet Webworm Flea Beetles Carrion Beetles Beet Armyworm* Variegated Cutworm Voringation - ROTAM METHOMYL 29LV per acre per crop. Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop. Copers Tobacco Budworm Vellowstriped Armyworm Variegated Cutworm Voringation - ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation to control beet armyworm, aphids and western yellowstriped armyworm. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  Loopers Tobacco Budworm Beet Armyworm Vellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Cucumber Beetles Cucumber Beetles Cucumber Beetles Cucumber Beetles Thirps Tobacco Budworm Bet Armyworm Vellowstriped Armyworm Tobacco Budworm

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Tomato (Including Tomatillos*)	Tomato Fruitworm Aphids Hornworm Loopers Beet Armyworm Southern Armyworm Pinworm Armyworm Fall Armyworm	1 1/2 - 3		48 hrs
	Do not apply more than 21 pints Do not make more than 16 app * For tomatillos do not apply mo acre per crop. Do not make more than 5 applie	lications per crop. ore than 15 pints of Ro		
Turf (For use on sod farms only)	Sod Webworm (after application, sprinkle irrigate for 15 minutes)	3 (1.1 fl. ozs. per 1000 sq. ft.)		48 hrs
	Do not apply more than 12 pints Do not make more than 4 applic Do not graze or feed.		MYL 29LV per acre per crop.	
Wheat	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
	cereal leaf beetle eggs when ap be timed to correspond with the egg hatch to achieve maximum currently registered in California	cations per crop. MYL 29LV may be applied to the highest listed it is of water per acre. So ethological experience of newly ovicidal effect. Use of a.  p must be actively grons (such as, extreme	pplied by overhead sprinkler rate of ROTAM METHOMYL ee CHEMIGATION section for provide contact ovicidal effect on bel directions. Application should a laid eggs or in anticipation of on this pest stage (egg) is not owing and not under stress from temperatures or drought).	

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only. Not for use or storage in or around the home.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Storage and Disposal Continued

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Pressure rinse as follows: Empty the remaining product contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Insert pressure rinsing nozzle in the container, and rinse at about 40 PSI for at least 30 seconds. Drain rinsate for 10 seconds after the flow begins to drip. Pour or pump rinsate into application equipment or rinsate collection system. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Storage and Disposal Continued

All Refillable Containers: Refillable container. Refilling Container: Refill this container with ROTAM METHOMYL 29LV containing methomyl only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see proceeding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not transport if container is damaged or leaking.

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Rotam Agrochemical Company Limited or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Rotam Agrochemical Company Limited and Seller harmless for any claims relating to such factors.

Rotam Agrochemical Company Limited warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Rotam Agrochemical Company Limited, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW ROTAM LTD MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, Rotam Agrochemical Company Limited or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM AGROCHEMICAL COMPANY LIMITED AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ROTAM AGROCHEMICAL COMPANY LIMITED OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Rotam Agrochemical Company Limited and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Rotam Agrochemical Company Limited.

Manufactured by: 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826 Registered: [TBA]

[Back Page of Booklet - remains on the container when booklet is removed]

### RESTRICTED USE PESTICIDE

Due to high Acute Toxicity to Humans

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

> GROUP 1A INSECTICIDE

## Rotam Methomyl 29LV Insecticide

#### Water Soluble Liquid

Active Ingredient	By Weight
Methomyl	
(S-methyl-N-[(methylcarbamoyl) oxy]thioacetimidate)	29%
Other Ingredients	71%
TOTAL	100%
Contains Methanol	

[Placeholder to identify Container type]

EPA Reg. No. 83100 - 27 EPA Est. No.: 5905-GA-01

#### KEEP OUT OF REACH OF CHILDREN DANGER POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Refer to inside label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations, Engineering Controls Statements, Environmental Hazards and Directions For

#### FIRST AID

(N-Methyl Carbamate insecticide)

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

**POISONING SYMPTOMS** — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section and seek medical attention at once.

#### **NOTE TO PHYSICIAN**

Probable mucosal damage may contraindicate the use of gastric lavage.

**TREATMENT** — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact the National Poison Control Center 24-hr Emergency Hotline at: 1-800-222-1222.

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS KEEP OUT OF REACH OF CHILDREN DANGER POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Restricted Use Pesticide due to toxicity categories. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Contains Methanol. Methanol may cause blindness. Causes irreversible eye damage. May be fatal if swallowed or if inhaled. Harmful if absorbed through skin. Do not get in eyes or on clothing. Do not breathe spray mist. Avoid contact with skin.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, cleaners, repairers of application equipment, and others exposed to the concentrate must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as natural rubber or other materials in EPA category C.
- · Socks and chemical resistant footwear.
- Protective eyewear.
- Chemical resistant apron.
- Respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any R, P, or HE prefilter.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of

equipment washwater or rinsate.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

#### PHYSICAL AND CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation. The product shows potential explosive properties when heated to elevated temperatures.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only. Not for use or storage in or around the home.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Storage and Disposal Continued

#### CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Storage and Disposal Continued

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Pressure rinse as follows: Empty the remaining product contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Insert pressure rinsing nozzle in the container, and rinse at about 40 PSI for at least 30 seconds. Drain rinsate for 10 seconds after the flow begins to drip. Pour or pump rinsate into application equipment or rinsate collection system. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

All Refillable Containers: Refillable container. Refilling Container: Refill this container with ROTAM METHOMYL 29LV containing methomyl only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see proceeding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not transport if container is damaged or leaking.

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Registered: (TBA)

Net Contents Gallons TBA Reviews

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#### reviews for methomyl 83100-27, 83100-28

Thomas Harris o Frank Sobotka

04/06/2011 06:11 PM

Dr. Sobotka,

Attached are the product chemistry and acute toxicology reviews for Rotam methomyl products 83100-27 and 83100-28 which were registered yesterday (4/5/2011). Please use these copies to replace any previous versions I had sent you (some minor administrative changes made on earlier version of a couple of reviews). Unless requested otherwise, I will not mail you paper copies of this material. This email (and yesterday's email with the stamped labels) will constitute the officially delivery of this material.

Again, thank you for your prompt attention to any issues we brought up and to label revisions as they were requested.

83100-ET

POP

83100-ET.product chemistry.20110318.no CBI.pdf

PDF

83100-ET. product chemistry. addendum. 20110318. no CBI. pdf

POF

83100-00027. acute tox review. 20110228.pdf

83100-EI

FOT

083100-00028.prod chem.20110331.no CBI.image.pdf

PDF

083100-00028.prod chem addendum.20110331.no CBI.image.pdf

FOF

83100-00028. acute tox review. 20110310.pdf

Tom Harris EPA/OCSPP/OPP/RD/IRB voice: (703) 308-9423 fax: (703) 308-0029 harris.thomas@epa.gov

visit http://www.epa.gov/pesticides

DP BARCODE No.: D38805 ILE SYMBOL No.: 83100-ET(a); DECISION No.: 439801; PC Code(s):

090301; Action Code: R 310; FOOD Use: Yes

DATE OUT:

SUBJECT:

March 18, 2011

End Use Product Chemistry Review

Product Name: Rotam Methomyl 29% LV Insecticide

FROM:

Shyam Mathur

Product Chemistry Team Leader

Technical Review Branch / Registration Division (7505P)

TO:

Thomas Harris / John Hebert, PM 07

Insecticide-Rodenticide Branch / Registration Division (7505P)

Company Name: Rotam Agrochemical Co., Ltd

Formulation Type: Insecticide, Water Soluble Liquid (WSL)

#### INTRODUCTION

The product chemistry data on this end use product were reviewed previously (see PCR dated March 18, 2011, DP383465, MRID Nos. 482239-01 through 482239-03). The registrant submitted additional data on the guideline 830.1600 (description of materials used to produce the product) for the revised basic CSF (dated March 7, 2011) with MRID No. 484167-01. At same time the registrant also submitted additional data on the guideline 830.1600 (description of materials used to produce the product) with MRID No. 484166-01 corresponding to the revised alternate CSF (dated 3-16-11). TRB has been asked to evaluate the additional product chemistry data submitted.

#### **SUMMARY OF FINDINGS:**

- 1. Name of Active Ingredient(s): Methomyl (29.00%)
- 2. All the source materials for the active ingredients are derived from registered sources:

  [] Yes; [X] No. The TGAI (File Symbol is being registered concurrently.
- All inert ingredients have been screened by IIAB and found to be approved for the proposed labeled uses [X] Yes; [ ] No.
- 4. Confidential Statement of Formula(s):
  - [X] Basic Dated: November 10, 2009; resubmitted (email on 03-10-11) Dated: March 7, 2011
  - [X] Alternate (e-mail on 03-07-11) Dated: March 7, 2011; resubmitted (e-mail 03-16-11)-Dated 03-16-11

\*Product ingredient source information may be entitled to confidential treatment\*

DP BARCODE No.: <u>D388055</u>, FILE SYMBOL No.: <u>83100-ET(a)</u>; <u>DECISION No.: 439801</u>; <u>PC Code(s)</u>: <u>090301</u>; Action Code: <u>R 310</u>; FOOD Use: <u>Yes</u>

Group A: Product Chemistry Data

TRB's determination of the acceptability of the data for the proposed product is listed in the tables below.

Guideline No.	Study Title		Data submitted		TRB's Assessment	MRID Nos.	
			Yes	No	of Data	INITID ITOS.	
830.1550	Product Iden	ntity & Composition	X		Α	482239-01	
830.1600	Description of materials used to produce the product		x		A	484167-01 484166-01	
830.1650	Description of formulation process Discussion on the formation of impurities		x		Α	482239-01	
830.1670			х		A	482239-01	
830.1700	Preliminary	Preliminary analysis					
		Standard certified limits	x		A		
	Certified	Proposed Limits				482239-01	
830.1750	(158.350) Jus wid 30.1750						
830.1800	Enforcemen	t analytical method	х		A	482239-02	

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable

#### CONCLUSIONS:

The TRB has reviewed the CSF(s) and the additional product chemistry data corresponding to guideline 830,1600 for the proposed end use product and has concluded:

- 1. The proposed revised CSF for basic formulation (dated 03-07-11) & the revised CSF for alternate formulation (dated 03-16-11) are acceptable.
- 2. The additional data submitted corresponding to guideline 830.1600 (description of materials used to produce the product), are acceptable.
- 3. The registrant must change the "Inert ingredient" and replace it with "Other ingredient" under Ingredient Statement on the product label.



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Office of Chemical Safety and Pollution

February 28, 2011

ROTAM Methomyl 29LV Insecticide 83100-ET MEMORANDUM Name of Pesticide Product: D383467 EPA File Symbol: R310 Subject:

439801

090301 Methomyl DP Barcode: Decision No.:

Action Code: PC Codes:

Breann Hanson, Biologist Technical Review Branch (TRB) Registration Division (RD; 7505P) From:

Thomas Harris, RM Team 07

Registration Division (7505P) Insecticide Branch

ROTAM Agrochemical Company, Ltd. To: c/o IPM Resources LLC (Agent) Applicant:

4032 Crockers Lake Blvd., Suite 818

Sarasota, FL 34238

FORMULATION FROM LABEL:

CAS No. 16752-77-5 Active Ingredients:

Methomyl 090301

Other Ingredients:

EPA File Symbol: 83100-ET

**ACTION REQUESTED:** The Risk Manager requests: "83100-ET, methomyl, generic 29% end-use; Please review product acute toxicology (MRID 482239-04) for new methomyl end-use product. Also, please comment on claim of similarity to 352-384."

BACKGROUND: ROTAM Agrochemical Company, Ltd. (herein the "registrant") has submitted acute oral, acute dermal, acute inhalation, primary eye irritation, primary skin irritation and dermal sensitization studies (MRID 48223904) in support of their registration for ROTAM Methomyl 29LV Insecticide, EPA File Symbol: 83100-ET. The studies were performed at Eurofins|Product Safety Laboratories. Included in the data package was the study volume, basic CSF (dated 11/10/2009), proposed label, letter from the Agent for the registrant, and basic CSF and label for the proposed product).

#### COMMENTS AND RECOMMENDATIONS:

- 1. The six studies have been reviewed and all are classified as Acceptable.
- 2. The acute toxicity profile for ROTAM Methomyl 29LV Insecticide, EPA File Symbol: 83100-ET, is as follows:

Acute oral toxicity	II	Acceptable	MRID 48223904*
Acute dermal toxicity	III	Acceptable	MRID 48223904*
Acute inhalation toxicity	II	Acceptable	MRID 48223904*
Acute eye irritation	I	Acceptable	MRID 48223904*
Primary skin irritation	IV	Acceptable	MRID 48223904*
Dermal sensitization	Negative	Acceptable	MRID 48223904*

- \* All six studies were included in one volume and all assigned the same MRID. Please inform the registrant that each individual study should be submitted separately so that each study receives its own individual MRID. In addition, a copy of the original certificate of analysis was not provided in the study reports. Although these omissions had no effect on the overall acceptability of the studies, please inform the registrant that these should be included within each study report.
- 3. As a complete 6-pack of acute toxicity studies were submitted, a determination of similarity with respect to toxicity with 352-384 is not necessary. The precautionary label language and first aid statements must be based on the above acute toxicity profile. The proposed label for 83100-ET and the cited label for 352-384 are substantially similar in labeling of use sites.
- 4. The proposed label must be amended to include the Toxicity Category I signal word DANGER and the skull and crossbones symbol based on the Toxicity Category I classification for eye irritation and the presence of methanol at >4% of the formulation; the label must also be amended to include Toxicity Category I eye irritation precautionary language. Also, the proposed label does not contain Toxicity Category II acute inhalation precautionary label language; instead it includes Toxicity Category III language, therefore the label must be amended. In addition, as there was no corrosivity noted in the eye irritation study, the statement "Corrosive" does not need to be included on the label.
- 5. In addition to the above precautionary labeling issues, the proposed label contains reduced PPE for "applicators and other exposed to the diluted spray solution..." This reviewer has not examined any dilution studies or seen any justification from the registrant that supports the inclusion of reduced PPE label language. This reviewer recommends removing all dilution-use PPE language. In addition, this reviewer recommends that the chemical resistance category be changed to "C" due to the presence of methanol as a co-solvent.

EPA File Symbol: 83100-ET

6. Based on the toxicity profile above, the following are the precautionary and first aid statements for this product as obtained from the Label Review System:

PRODUCT ID #: 083100-00027

PRODUCT NAME: ROTAM Methomyl 29LV Insecticide

PRECAUTIONARY STATEMENTS

SIGNAL WORD: DANGER POISON

#### SPANISH SIGNAL WORD: PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

#### Hazards to Humans and Domestic Animals:

Restricted Use Pesticide due to toxicity categories. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Contains Methanol. Methanol may cause blindness. Causes irreversible eye damage. May be fatal if swallowed or if inhaled. Harmful if absorbed through skin. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Do not breathe spray mist. Avoid contact with skin.

Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Natural Rubber, Selection Category C). For handling activities, applicators must wear a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any R, P, or HE prefilter.

USER SAFETY RECOMMENDATIONS: Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

#### First Aid:

#### If in eyes:

- -Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- -Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- -Call a poison control center or doctor for treatment advice.

#### If inhaled:

- -Move the person to fresh air.
- -If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- -Call a poison control center or doctor for further treatment advice.

#### If swallowed:

- -Call a poison control center or doctor immediately for treatment advice.
- -Have person sip a glass of water if able to swallow.
- -Do not induce vomiting unless told to by a poison control center or doctor.
- -Do not give anything to an unconscious person.

#### If on skin:

- -Take off contaminated clothing.
- -Rinse skin immediately with plenty of water for 15-20 minutes.
- -Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: [Note to PM/CRM/Registrant: The proposed label must contain a Note to Physician which

EPA File Symbol: 83100-ET

addresses the category I Primary Eye Irritant toxicity. The following statement is required to appear on the label]: Probable mucosal damage may contraindicate the use of gastric lavage.

NOTE TO PHYSICIAN: [Note to CRM/PM/Registrant: The proposed label should contain a "Note to Physician" which addresses the presence of a cholinesterase inhibitor. The following statements are suggested types of information that may be included, if applicable: - technical information on symptomatology; - use of supportive treatments to maintain life functions; - medicine that will counteract the specific physiological effects of the pesticide; - company telephone number to specific medical personnel who can provide specialized medical advice.]

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

7. The basic CSF (dated 11/10/2009) for the proposed product must be approved by the TRB Product Chemistry Team.

EPA File Symbol: 83100-ET

Reviewer: Breann Hanson

Risk Manager (EPA): Thomas Harris, RM Team 07

Date: February 23, 2011

STUDY TYPE: Acute Oral Toxicity - Rat; OPPTS 870.1100; OECD 425

TEST MATERIAL: Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8)

CITATION: Durando, J. (2007) Acute Oral Toxicity Up and Down Procedure in Rats. Laboratory Study Number: 22668. Unpublished study prepared by Eurofins Product Safety Laboratories. October 18, 2007. MRID 48223904.

SPONSOR: ROTAM Agrochemical Company, Ltd.

EXECUTIVE SUMMARY: In an acute oral toxicity study (MRID 48223904), a total of seven young adult female rats (age: 9-10 weeks; weight: 184-210 g; source: Ace Animals, Inc., Boyertown, PA; strain: Sprague-Dawley derived, albino) were given a single oral dose of Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8), which was administered as a 10% w/v mixture in distilled water, by gavage at a dose of either 17.4, 55 or 174 mg/kg bw. Initially, a single animal was dosed at 17.4 mg/kg based on an estimated LD50 provided by the sponsor; an additional six animals were then dosed according to the Up and Down Procedure. The test substance was administered in sequence; the decision to proceed with the next animal was based on the survival of the previous animal post-dosing. Individual body weights were recorded prior to dosing (study day 0) and again on study days 7 and 14 or after death. The animals were observed for mortality, clinical signs of toxicity and behavioural changes during the first several hours post-dosing and at least once daily thereafter for the remainder of the 14-day study period. All animals were necropsied.

All animals dosed at 17.4 mg/kg bw (1 animal) and 55 mg/kg bw (3 animals) survived, gained body weight, and appeared active and healthy throughout the study period. No gross internal findings were observed at necropsy.

All animals dosed at 174 mg/kg bw (3 animals) died within 1-hour post-dosing. Prior to death, animals exhibited hypoactivity and tremors and/or hunched posture. At necropsy, red intestines were observed in all three decedents.

Oral LD<sub>50</sub> Females = 102.7 mg/kg bw (95% C.I. = 55 - 174 mg/kg bw)

Based on the calculated  $LD_{50}$  in females, Methomyl 29% SL is classified as EPA Toxicity Category II.

This acute oral study is classified as Acceptable. It satisfies the guideline requirement for an acute oral study (OPPTS 870.1100; OECD 425) in the rat.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

EPA File Symbol: 83100-ET

#### RESULTS and DISCUSSION: Individual animals were dosed as follows:

Limit Test

Dosing Sequence	Animal No.	Dose level (mg/kg)	Short-Term Outcome	Long-Term Outcome
1	3101	17.4	S	S
2	3102	55	S	S
3	3103	174	D	D
4	3104	55	S	S
5	3105	174	D	D
6	3106	55	S	S
7	3107	174	D	D

S = survival D = death

Initially, a single animal was dosed at 17.4 mg/kg based on an estimated LD50 provided by the sponsor; an additional six animals were then dosed according to the Up and Down Procedure. The test substance was administered in sequence; the decision to proceed with the next animal was based on the survival of the previous animal post-dosing. The test substance was administered as a 10% w/v mixture in distilled water

<u>Statistics</u>: Acute Oral Toxicity (Guideline 425) Statistical Program (Westat, version 1.0, May 2001) was used for all data analyses including: dose progression selections, stopping criteria determinations and/or  $LD_{50}$  and confidence limit calculations.

AOT425statpgm (Version: 1.0) Test Results and Recommendations Acute Oral Toxicity (OECD Test Guideline 425) Statistical Program

Date/Time: Wednesday, February 23, 2011, 3:51:52 PM

Data file name: work.dat

Last modified: 2/23/2011 3:51:51 PM

Test/Substance: methomyl 29

Test type: Main Test Limit dose (mg/kg): 2000 Assumed LD50 (mg/kg): Default Assumed sigma (mg/kg): 0.5

Recommended dose progression: 2000, 550, 175, 55, 17.5, 5.5, 1.75

#### DATA:

Test	Anima	al Dose	Short-term	Long-term	
Seq.	ID	(mg/kg)	Result	Result	
1	3101	17.4	0	0	
2	3102	55	0	0	
3	3103	174	X	X	
4	3104	55	0	0	
5	3105	174	X	X	
6	3106	55	0	0	
7	3107	174	X	X	

(X = Died, O = Survived)

Dose Recommendation: The main test is complete. Stopping criteria met: 5 reversals in 6 tests.

EPA File Symbol: 83100-ET

#### SUMMARY OF LONG-TERM RESULTS:

Dose	0	X	Total	
17.4	1	0	1	
55	3	0	3	
174	0	3	3	
All Doses	4	3	7	

Statistical Estimate based on long term outcomes: Estimated LD50 = 102.7 (Based on an assumed sigma of 0.5). Approximate 95% confidence interval is 55 to 174.

- A. <u>Mortality</u>: All animals dosed at 17.4 mg/kg bw (1 animal) and 55 mg/kg bw (3 animals) survived throughout the study period. All animals dosed at 174 mg/kg bw (3 animals) died within 1-hour post-dosing.
- **B.** <u>Clinical observations</u>: All animals dosed at 17.4 mg/kg bw (1 animal) and 55 mg/kg bw (3 animals) gained body weight, and appeared active and healthy throughout the study period. Prior to death in animals dosed at 174 mg/kg bw, animals exhibited hypoactivity and tremors and/or hunched posture.
- C. <u>Gross Necropsy</u>: No gross internal findings were observed at necropsy for animals that survived the study period. At necropsy, red intestines were observed in all three decedents.
- **D.** Reviewer's Conclusions: This reviewer agrees with the study author's conclusions. Based on the calculated LD<sub>50</sub> in females, Methomyl 29% SL is classified as EPA Toxicity Category II.
- E. <u>Deficiencies</u>: A copy of the original certificate of analysis was not provided in the study report. This omission has no effect on the overall acceptability of the study.

EPA File Symbol: 83100-ET

Reviewer: Breann Hanson

Risk Manager (EPA): Thomas Harris, RM Team 07

Date: February 23, 2011

STUDY TYPE: Acute Dermal Toxicity - Rat; OPPTS 870.1200; OECD 402

TEST MATERIAL: Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8)

CITATION: Durando, J. (2007) Acute Dermal Toxicity Study in Rats – Limit Test. Laboratory Study Number: 22669. Unpublished study prepared by Eurofins Product Safety Laboratories. October 18, 2007. MRID 48223904.

SPONSOR: ROTAM Agrochemical Company, Ltd.

EXECUTIVE SUMMARY: In an acute dermal toxicity study (MRID 48223904), 5/sex rats (age: 10-11 weeks; weight: 323-371 g males, 212-228 g females; source: Ace Animals, Inc., Boyertown, PA; strain: Sprague-Dawley derived, albino) were dermally exposed to Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8) at a limit dose of 2000 mg/kg bw. The test substance was applied evenly over a dose area, covering approximately 10% of the body surface, covered with a gauze pad and then wrapped with tape and left in place for 24 hours. Post-exposure, the dose areas were gently cleansed. Individual body weights were recorded prior to application (study day 0) and again on study days 7 and 14. The animals were observed for mortality, clinical signs of toxicity and behavioural changes during the first several hours post-application and at least once daily thereafter for the remainder of the 14 day study period. All animals were necropsied.

All 10/10 animals survived and, apart from dermal irritation (erythema and edema) noted at the dose sites of all 5/5 female animals between study days 1 and 5, appeared active and healthy throughout the study period. Two female animals lost body weight through study day 7; all animals, with the exception of one female animal, exceeded their initial body weights at study termination. No gross internal findings were observed at necropsy.

Dermal LD<sub>50</sub> Males > 2000 mg/kg bw Dermal LD<sub>50</sub> Females > 2000 mg/kg bw Dermal LD<sub>50</sub> Combined > 2000 mg/kg bw

Based on the observed LD50, Methomyl 29% SL is classified as EPA Toxicity Category III.

This acute dermal study is classified Acceptable. It does satisfy the guideline requirement for an acute dermal study (OPPTS 870.1200; OECD 402) in the rat.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

EPA File Symbol: 83100-ET

#### RESULTS and DISCUSSION:

	The Late of the State of the St	Mortality/Number Tested	
Dose (mg/kg bw)	Males	Females	Combined
2000	0/5	0/5	0/10

<u>Statistics</u>: No statistical analysis was required since all animals survived at the limit dose. The dermal  $LD_{50}$  was observed as being > 2000 mg/kg.

A. Mortality: None; all animals survived.

**B.** Clinical observations: Apart from dermal irritation (erythema and edema) noted at the dose sites of all 5/5 female animals between study days 1 and 5, animals appeared active and healthy throughout the study period. Two female animals lost body weight through study day 7; all animals, with the exception of one female animal, exceeded their initial body weights at study termination.

C. Gross Necropsy: No gross internal findings were observed at necropsy.

**D.** Reviewer's Conclusions: This reviewer agrees with the study author's conclusions. Based on the  $LD_{50}$ , Methomyl 29% SL is classified as EPA Toxicity Category III.

E. <u>Deficiencies</u>: A copy of the original certificate of analysis was not provided in the study report. This omission has no effect on the overall acceptability of the study.

EPA File Symbol: 83100-ET

Reviewer: Breann Hanson

Date: February 23, 2011

Risk Manager (EPA): Thomas Harris, RM Team 07

STUDY TYPE: Acute Inhalation Toxicity - Rat; OPPTS 870.1300; OECD 403

TEST MATERIAL: Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8)

CITATION: Durando, J. (2007) Acute Inhalation Toxicity Study in Rats – Limit Test. Laboratory Study Number: 22670. Unpublished study prepared by Eurofins|Product Safety Laboratories. October 18, 2007. MRID 48223904.

SPONSOR: ROTAM Agrochemical Company, Ltd.

EXECUTIVE SUMMARY: In an acute inhalation toxicity study (MRID 48223904), 5/sex/group young adult rats (age: 9-11 weeks; weight: 266-379 g males; 206-240 g females; source: Ace Animals, Inc., Boyertown, Pennsylvania; strain: Sprague-Dawley derived, albino) were exposed nose-only via the inhalation route to Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8) for up to 4 hours at a gravimetrically determined concentration of either 0.053 mg/L or 0.35 mg/L. Individual animal body weights were recorded prior to exposure (initial) and again on study days 7 and 14 or after death. The animals were observed for mortality during the exposure period and for clinical signs of toxicity upon removal from the exposure chamber and at least once daily thereafter for the remainder of the 14 day study period. All animals were necropsied at the end of the study.

All 10/10 animals exposed to the test substance at a concentration of 0.053 mg/L survived, gained weight and appeared active and healthy throughout the study period. No gross internal findings were observed at necropsy. The MMAD was  $2.15 \mu m$  and the GSD 1.97.

All 10/10 animals exposed to the test substance at a concentration of 0.35 mg/L died within 1.25 hours of exposure. No clinical signs of toxicity were observed prior to death. At necropsy, discoloration and edema of the lungs were observed in all decedents.

 $LC_{50}$  Combined > 0.053 mg/L  $LC_{50}$  Males > 0.053 mg/L  $LC_{50}$  Females > 0.053 mg/L

Based on the observed  $LC_{50}$  being greater than 0.053 mg/L, Methomyl 29% SL is classified as EPA Toxicity Category II for acute inhalation toxicity.

This acute inhalation study is classified as acceptable. It does satisfy the guideline requirement for an acute inhalation study (OPPTS 870.1300; OECD 403) in the rat.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

EPA File Symbol: 83100-ET

#### **RESULTS and DISCUSSION:**

Nominal	Gravimetric	MMAD	GSD	Mortality/Number Tested		Tested
Conc. (mg/L)	Conc. (mg/L)	μm		Males	Females	Combined
1.47	0.053	2.15	1.97	0/5	0/5	0/10
18.68	0.35	-		5/5	5/5	10/10

#### Test Atmosphere / Chamber Description:

Gravimetric Conc. (mg/L):	0.053	0.35
Chamber Volume:	6.7 L	6.7 L
Total Airflow (mean):	25.7 LPM	25.7 LPM
Temperature:	21-23 °C	21-22 °C
Relative Humidity:	62-67%	62-67%
Time to equilibrium:	1.2 min	1.2 min

Test atmosphere concentration: Gravimetric: Samples were withdrawn periodically from the breathing zones of the animals during each exposure and collected using glass fiber filters. The filter paper was weighed before and after collection to determine the mass collected; and this, divided by the total volume of air sampled.

Particle size determination: Particle size was determined twice during exposure using an eight-stage Andersen cascade impactor. Samples were withdrawn from the breathing zone of the test animals onto filter papers which were weighed before and after sampling to determine the mass collected. MMAD and GSD were determined graphically using two-cycle log probit axes.

- **A. Mortality:** All 10/10 animals exposed to the test substance at a concentration of 0.053 mg/L survived. All 10/10 animals exposed to the test substance at a concentration of 0.35 mg/L died within 1.25 hours of exposure.
- **B.** Clinical observations: All 10/10 animals exposed to the test substance at a concentration of 0.053 mg/L gained weight and appeared active and healthy throughout the study period. The MMAD was 2.15 μm and the GSD 1.97.No clinical signs of toxicity were observed prior to death in the 10/10 animals exposed to the test substance at a concentration of 0.35 mg/L.
- C. <u>Gross Necropsy:</u> No gross internal findings were observed at necropsy for animals exposed to the test substance at a concentration of 0.053 mg/L. At necropsy, discoloration and edema of the lungs were observed in all decedents.
- **D.** <u>Reviewer's Conclusions</u>: This reviewer agrees with the study author's conclusion. Based on the LC<sub>50</sub>, Methomyl 29% SL is classified as EPA Toxicity Category II.
- **E.** <u>Deficiencies</u>: A copy of the original certificate of analysis was not provided in the study report. This omission has no effect on the overall acceptability of the study.

EPA File Symbol: 83100-ET

Reviewer: Breann Hanson

Risk Manager (EPA): Thomas Harris, RM Team 07

Date: February 24, 2011

STUDY TYPE: Primary Eye Irritation - Rabbit; OPPTS 870.2400; OECD 405

TEST MATERIAL: Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8)

<u>CITATION</u>: Durando, J. (2007) Primary Eye Irritation Study in Rabbits. Laboratory Study Number: 22671. Unpublished study prepared by Eurofins|Product Safety Laboratories. October 18, 2007. MRID 48223904.

SPONSOR: ROTAM Agrochemical Company, Ltd.

EXECUTIVE SUMMARY: In a primary eye irritation study (MRID 48223904), 0.1 mL of Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8) was instilled into the conjunctival sac of the right eye in three female young adult rabbits (source: Robinson Services, Inc., Clemmons, NC; strain: New Zealand albino). The untreated left eye served as a control. Prior to instillation, 2-3 drops of an ocular anesthetic were placed into both eyes of each test animal. Test animals were scored for irritation at approximately 1, 24, 48, and 72 hours post-instillation and again on study days 4, 7, 10, 14, 17 and 21. Fluorescein dye was used at the 24-hour and at subsequent observations, if needed, to verify the absence of corneal damage. Test animals were observed for clinical signs of toxicity and behavioural changes at least once daily throughout the study period. Irritation was scored based on Draize.

Apart from the eye irritation noted, animals appeared active and healthy throughout the study period. For the first 4 days post-instillation, all 3/3 treated eyes exhibited positive corneal opacity (score 1), iritis (score 1) and conjunctival redness (score 2), chemosis (score 2) and discharge (score 3). The overall incidence and severity of irritation decreased gradually thereafter. Ocular irritation persisted in one treated eye through study day 21 (study termination). The maximum mean total score was 37.0, observed at 24-hours. The test substance is classified as severely irritating to the eye.

Based on "positive" eye irritation persisting through study day 21, Methomyl 29% SL is considered severely irritating and classified as EPA Toxicity Category I for primary eye irritation.

This study is classified as Acceptable. It does satisfy the guideline requirement for a primary eye irritation study (OPPTS 870.2400; OECD 405) in the rabbit.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

EPA File Symbol: 83100-ET

#### RESULTS and DISCUSSION:

Observations	Number "positive"/number tested									
	Hours				Days					
	1	24	48	72	4	7	10	14	17	21
Corneal Opacity	3/3	3/3	3/3	3/3	3/3	3/3	3/3	3/3	1/3	1/3
Iritis	3/3	3/3	3/3	3/3	3/3	3/3	3/3	2/3	0/3	0/3
Redness*	3/3	3/3	3/3	3/3	3/3	0/3	0/3	0/3	0/3	0/3
Chemosis*	3/3	2/3	2/3	1/3	0/3	0/3	0/3	0/3	0/3	0/3
Discharge*	3/3	3/3	3/3	2/3	0/3	0/3	0/3	0/3	0/3	0/3
Severity of Irritation – Mean Score	34	37	36.3	35	32.3	23.3	19.3	12	4	2.3

<sup>\*</sup>Score of 2 or more required to be considered "positive."

A. Observations: For the first 4 days post-instillation, all 3/3 treated eyes exhibited positive corneal opacity (score 1), iritis (score 1) and conjunctival redness (score 2), chemosis (score 2) and discharge (score 3). The overall incidence and severity of irritation decreased gradually thereafter. Ocular irritation persisted in one treated eye through study day 21 (study termination). The maximum mean total score was 37.0, observed at 24-hours.

**B.** Results: Methomyl 29% SL was severely irritating to the eye. The maximum mean total score was 37.0, observed at 24-hours.

C. <u>Reviewer's Conclusions</u>: This reviewer agrees with the study author's conclusions. Methomyl 29% SL is classified as EPA Toxicity Category I.

**D.** <u>Deficiencies</u>: A copy of the original certificate of analysis was not provided in the study report. This omission has no effect on the overall acceptability of the study.

EPA File Symbol: 83100-ET

Reviewer: Breann Hanson

Risk Manager (EPA): Thomas Harris, RM Team 07

Date: February 24, 2011

STUDY TYPE: Primary Dermal Irritation - Rabbit; OPPTS 870.2500; OECD 404

TEST MATERIAL: Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8)

**CITATION:** Durando, J. (2007) Primary Skin Irritation Study in Rabbits. Laboratory Study Number: 22672. Unpublished study prepared by Eurofins|Product Safety Laboratories. October 18, 2007. MRID 48223904.

SPONSOR: ROTAM Agrochemical Company, Ltd.

EXECUTIVE SUMMARY: In a primary skin irritation study (MRID 48223904), 3 young adult female rabbits (source: Robinson Services, Inc., Clemmons, NC; strain: New Zealand albino) were dermally exposed to 0.5 mL of Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8). The test substance was applied to an intact dose site on each animal and covered with a gauze pad, wrapped with semi-occlusive tape and held in place for 4 hours. Dermal irritation was scored based on the Draize system within 30-60 minutes post-pad removal and again at approximately 24, 48 and 72 hours. Animals were observed for clinical signs of toxicity and behavioural changes at least once daily throughout the study period.

Apart from the dermal irritation noted, all animals appeared active and healthy throughout the study period. No edema was observed at any point during the study. Within 1-hour, all 3/3 treated sites exhibited very slight erythema (score 1). The overall incidence and severity of irritation decreased with time. Animals were free from dermal irritation within 48-hours. The primary dermal irritation index (PDII) score is 0.3.

Based on the lack of irritation noted at 48-hours, Methomyl 29% SL is classified as EPA Toxicity Category IV for primary skin irritation.

This study is classified as Acceptable. It does satisfy the guideline requirement for a primary skin irritation study (OPPTS 870.2500; OECD 404) in the rabbit.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

EPA File Symbol: 83100-ET

#### **RESULTS and DISCUSSION:**

#### INDIVIDUAL SKIN IRRITATION SCORES ERYTHEMA/EDEMA

	Sex	Hours					
Animal No.		0.5 - 1	24	48	72		
3501		1/0	0/0	0/0	0/0		
3502	F	1/0	0/0	0/0	0/0		
3503		1/0	1/0	0/0	0/0		
Severity of Irritation - Mean	1/0	0.3/0	0/0	0/0			

A. Observations: No edema was observed at any point during the study. Within 1-hour, all 3/3 treated sites exhibited very slight erythema (score 1). The overall incidence and severity of irritation decreased with time. Animals were free from dermal irritation within 48-hours.

B. Results: The PDII score is 0.3.

C. <u>Reviewer's Conclusions</u>: This reviewer agrees with the study author's conclusions. Based on the slight irritation observed, Methomyl 29% SL is classified as EPA Toxicity Category IV.

**D.** <u>Deficiencies</u>: A copy of the original certificate of analysis was not provided in the study report. This omission has no effect on the overall acceptability of the study.

EPA File Symbol: 83100-ET

Reviewer: Breann Hanson

Risk Manager (EPA): Thomas Harris, RM Team 07

Date: February 24, 2011

STUDY TYPE: Dermal Sensitization - Guinea Pig; OPPTS 870.2600; OECD 406

TEST MATERIAL: Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8)

CITATION: Durando, J. (2007) Dermal Sensitization Study in Guinea Pigs (Buehler Method). Laboratory Study Number: 22673. Unpublished study prepared by Eurofins Product Safety Laboratories. October 18, 2007. MRID 48223904.

SPONSOR: ROTAM Agrochemical Company, Ltd.

EXECUTIVE SUMMARY: In a dermal sensitization study (MRID 48223904) with Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8), 15/sex young adult guinea pigs (Weight: 332-417 g males, 318-387 f females; Source: Elm Hill Breeding Labs, Chelmsford, MA; strain: Hartley albino) were tested according to the Buehler method.

Twenty test animals were exposed to a single application per week for a 3 week induction period to 0.4 mL of the undiluted test substance. The test substance was applied to the left side of each test animal via an occlusive chamber which was secured and left in place for 6 hours. Approximately 24 and 48 hours after each induction animals were observed for dermal irritation and scored for irritation.

Twenty-seven days after the first induction, a challenge dose of 0.4 mL of the undiluted test substance was applied to naive sites on the right sides of both the 20 test animals and to an additional 10 naïve control animals for 6 hours. The 10 naïve control guinea pigs were maintained under identical conditions and were treated with the test substance at challenge only. Approximately 24 and 48 hours after challenge application animals were observed for dermal irritation and scored for irritation.

The procedures were validated with alpha-hexylcinnamaldehyde as the positive control substance.

During the induction phase, very faint erythema (score 0.5) was noted for most test sites. At challenge, very faint erythema was noted for 12/20 test sties 24 hours after challenge; similar irritation persisted at 6/20 sites through 48 hours. Very faint erythema was noted for 3/10 naïve sites 24 hours after challenge; similar irritation persisted at only 1/10 naïve sites through 48 hours.

Based on this study, Methomyl 29% SL is not a dermal sensitizer.

This study is classified as acceptable. It does satisfy the guideline requirement for a primary dermal sensitization study (OPPTS 870.2600; OECD 406) in the Guinea pig.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

#### I. PROCEDURE

A. <u>Induction</u> - Twenty test animals were exposed to a single application per week for a 3 week induction period to 0.4 mL of the undiluted test substance. The test substance was applied to the left side of each test animal via an occlusive chamber which was secured and left in place for 6 hours. Approximately 24 and 48 hours after each induction animals were observed for dermal irritation and scored for irritation.

EPA File Symbol: 83100-ET

**B.** <u>Challenge</u> - Twenty-seven days after the first induction, a challenge dose of 0.4 mL of the undiluted test substance was applied to naive sites on the right sides of both the 20 test animals and to an additional 10 naïve control animals for 6 hours. The 10 naïve control guinea pigs were maintained under identical conditions and were treated with the test substance at challenge only. Approximately 24 and 48 hours after challenge application animals were observed for dermal irritation and scored for irritation.

C. <u>Naive Controls</u> - The 10 naïve control guinea pigs were maintained under identical conditions and were treated with the test substance at challenge only.

#### II. RESULTS and DISCUSSION:

- A. Reactions and duration: During the induction phase, very faint erythema (score 0.5) was noted for most test sites. At challenge, very faint erythema was noted for 12/20 test sties 24 hours after challenge; similar irritation persisted at 6/20 sites through 48 hours. Very faint erythema was noted for 3/10 naïve sites 24 hours after challenge; similar irritation persisted at only 1/10 naïve sites through 48 hours.
- **B.** <u>Positive control</u>: The study authors included a positive control Buehler Method study (PSL Study #: 21953) performed with alpha-hexylcinnamaldehyde. The results were appropriate for a positive control study; at challenge 7/10 test animals exhibited positive dermal reactions at 24 hours, at 48 hours 4/10 test animals still exhibited these responses. No control animals exhibited any signs of a positive dermal reaction.

The submitted study, reviewed herein, was completed in October 2007. The Buehler positive control study was completed in May 2007.

- C. Reviewer's Conclusions: Agree with study author that the test substance is not a dermal sensitizer.
- **D.** <u>Deficiencies</u>: A copy of the original certificate of analysis was not provided in the study report. This omission has no effect on the overall acceptability of the study.

EPA File Symbol: 83100-ET

#### **ACUTE TOX ONE-LINERS:**

1. DP BARCODE: D383467

2. PC CODE: 090301

3. CURRENT DATE: 24/FEB/2011

4. TEST MATERIAL: Methomyl 29% SL (Methomyl content: 29% (by weight); Batch No.: 20070703036; PSL Reference No.: 070710-5H; clear yellow liquid; pH: 4.8)

Study/Species/Lab Study # /Date	MRID	Results	Tox. Cat.	Core Grade
Acute oral toxicity / rat Eurofins Product Safety Laboratories 22668 10/18//2007	48223904	Oral LD <sub>50</sub> Females = 102.7 mg/kg bw (95% C.I. = 55-174 mg/kg bw)	П	A
Acute dermal toxicity / rat Eurofins Product Safety Laboratories 22669 10/18//2007	48223904	Dermal LD <sub>50</sub> > 2000 mg/kg bw (males and females)	III	A
Acute inhalation toxicity / rat Eurofins Product Safety Laboratories 22670 10/18//2007	48223904	Inhalation LC <sub>50</sub> > 0.053 mg/L (males and females)	II	A
Primary eye irritation / rabbit Eurofins Product Safety Laboratories 22671 10/18//2007	48223904	For the first 4 days post-instillation, all 3/3 eyes exhibited positive corneal opacity (score 1), iritis (score 1) and conjunctival redness (score 2), chemosis (score 2) and discharge (score 3). The overall incidence and severity of irritation decreased gradually thereafter. Irritation persisted in one treated eye through study termination. The max mean total score was 37.0.	I	A
Primary dermal irritation /rabbit Eurofins Product Safety Laboratories 22672 10/18//2007	48223904	No edema. Within 1-hour: 3/3 sites exhibited very slight erythema (score 1). The overall incidence and severity of irritation decreased with time. Animals were free from dermal irritation within 48-hours. The PDII score is 0.3.	IV	A
Dermal Sensitization / guinea pig Eurofins   Product Safety Laboratories 22673 10/18//2007	48223904	Negative.		A

Core Grade Key: A = Acceptable, S = Supplementary, U = Unacceptable, W = Waived



DP BARCODE No.: D383465; FILE SYMBOL No.: 83100-ET; DECISION No.: 439801; PC Code(s):

090301; Action Code: R 310; FOOD Use: Yes

DATE OUT: March 18, 2011

SUBJECT: End Use Product Chemistry Review

Product Name: Rotam Methomyl 29% LV Insecticide

FROM: Shvam Mathur

Product Chemistry Team Leader

Technical Review Branch / Registration Division (7505P)

TO: Thomas Harris / John Hebert, PM 07

Insecticide-Rodenticide Branch / Registration Division (7505P)

Company Name: Rotam Agrochemical Co., Ltd

Formulation Type: Insecticide, Water Soluble Liquid (WSL)

### A. INTRODUCTION:

The applicant submitted an application for registration of a new food use end use product. In support of the application, the applicant submitted product chemistry data corresponding to guideline 830 series, group A & group B (MRIDs 482239-01 through 482239-03). A CSF for a basic formulation (dated 11/10/2009) was submitted along with the product label. On the advice of the Agency, the registrant submitted a revised & corrected basic CSF and an alternate CSF (both dated 03-07-11). However, the IIAB determined that the revised alternate CSF (dated 03-07-11) contains one inert ingredient which is not approved by the Agency. The registrant on March 16, 2011 submitted a revised alternate CSF (dated 03-16-11) in which the non-approved inert ingredient was replaced by another equivalent inert ingredient. The primary review on the product chemistry data was conducted by Oak Ridge National Laboratory, Oak Ridge, TN, USA. TRB has been asked to determine the acceptability of the product chemistry data and the proposed revised CSF's for basic and alternate formulations.

#### B. SUMMARY OF FINDINGS:

- 1. Name of Active Ingredient(s): Methomyl (29.00%)
- All the source materials for the active ingredients are derived from registered sources:
   Yes; [X] No. The TGAI (File Symbol ) is being registered concurrently.
- All inert ingredients have been screened by IIAB and found to be approved for the proposed labeled uses [X] Yes; [ ] No.
- 4. Confidential Statement of Formula(s):

[X] Basic - Dated: November 10, 2009; resubmitted (email on 03-10-11) - Dated: March 7, 2011

[X] Alternate (e-mail on 03-07-11) - Dated: March 7, 2011; resubmitted (e-mail 03-16-11)-Dated 03-16-11

\*Product ingredient source information may be entitled to confidential treatment\*

DP BARCODE No.: <u>D383465</u>; FILE SYMBOL No.: <u>83100-ET</u>; DECISION No.: <u>439801</u>; PC Code(s): 090301; Action Code: R 310; FOOD Use: Yes 5. Product label a. Ingredient statement: Nominal concentration of Al listed on CSF(s) concurs with product label (PR Notice 91-2) [X] Yes, if not, explain below: Metallic equivalent: [ ] Yes [X] NA; [ ] Yes [X] NA Soluble arsenic: I Yes [X] NA Isomeric ratios: [ ] Yes [X] NA; {name} acid equivalent = xx % Acid equivalent: b. Health related sub statements: Product contains? Petroleum distillate at > 10%: [ ] Yes [X] No [ ] NA Methanol at > 4%: [X] Yes [ ] No [ ] NA c. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for: flammability, explosive potential or electric insulator breakdown? [X] Yes [] No Is the sub statement in compliance with PR Notice 97-6 (Total Release Fogger)? [ ] Yes, [X] NA; [ ] No; if not, explain below: Note: The product label uses the term "inert ingredients" rather than "other ingredients." d. Label requires an additional Storage and Disposal statement: [ ] Yes [X] No; if yes explain below: DP BARCODE No.:  $\underline{D383465}$ ; FILE SYMBOL No.:  $\underline{83100\text{-ET}}$ ; DECISION No.:  $\underline{439801}$ ; PC Code(s):  $\underline{090301}$ ; Action Code:  $\underline{R}$  310; FOOD Use:  $\underline{Yes}$ 

# 6. Group A: Product Chemistry Data

TRB's determination of the acceptability of the data for the proposed product is listed in the tables below.

Guideline No.	Study Title		Data submitted		TRB's Assessment	MRID Nos.
	Study Title		Yes	No	of Data	MIKID NOS.
830.1550	Product Ider	ntity & Composition	X		Α	482239-01
830.1600	Description produce the	of materials used to product	x		A	482239-01
830.1650	Description process	of formulation	X		Α	482239-01
830.1670	Discussion of impurities	on the formation of	X		A	482239-01
830.1700	Preliminary	analysis	NA			
		Standard certified limits	x		Α	
830.1750	Certified limits (158.350) Proposed Limits Justification for wider limits	Proposed Limits				482239-01
				- N		
830.1800	Enforcemen	t analytical method	x		A	482239-02

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable

DP BARCODE No.:  $\underline{D383465}$ ; FILE SYMBOL No.:  $\underline{83100\text{-ET}}$ ; DECISION No.:  $\underline{439801}$ ; PC Code(s):  $\underline{090301}$ ; Action Code:  $\underline{R}$  310; FOOD Use:  $\underline{Yes}$ 

# 7. Group B:

Guideline No.	Study Title	Value or Qualitative Description	TRB's Assessment of Data	MRID Nos.
830.6303	Physical State	Liquid	A	482239-03
830.6315	Flammability	41.0 ± 0.5°C (105°F)	Α	482239-03
830.6316	Explodability	One endothermic peak at 105.3°C; one exothermic peak at 211.7°C. The product shows explosive properties.	A	482239-03
830.7000	рН	5.90 at 20°C 6.33 at 25°C	Α	482239-03 CSF
830.7300	Density (units)	D <sup>20</sup> <sub>4</sub> = 1.035	A	482239-03

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver request, NA = Not applicable, I = In progress

DP BARCODE No.: <u>D383465</u>; FILE SYMBOL No.: <u>83100-ET</u>; DECISION No.: <u>439801</u>; PC Code(s): 090301; Action Code: R 310; FOOD Use: Yes

# 8. <u>CONCLUSIONS</u>:

The TRB has reviewed the CSF(s) and product chemistry data for the proposed end use product and has concluded:

- The proposed revised CSF for basic formulation (dated 03-07-11) & the revised CSF for alternate formulation (dated 03-16-11) are acceptable.
- The data submitted corresponding to guideline 830.1600 (description of materials used to produce the product), 830.1650 (description of the formulation process), 830.1670 (discussion of the formation of impurities), 830.1750 (certified limits) and 830.1800 (enforcement analytical method) are acceptable.
- The product chemistry data submitted corresponding to guidelines 830.6302 (color), 830.6303 (physical state), 830.6304 (odor), 830.6314 (oxidation/reduction:chemical incompatibility), 830.6316 (explodability), pH (830.7000), viscosity (830.7100) and 830.7300 (density) are acceptable.
- 4. The test results of the guideline 830.6316 (explodability) indicated that the test material shows potential explosive properties. The temperature range was 30°C to 330°C. Consequently, the registrant is required to put under Physical-Hazard warning following statement:

"The product shows potential explosive properties when heated to elevated temperatures".

- 5. The product label must be revised under Ingredient Statement as follows:
  - "Inert Ingredients" must be replaced by "Other Ingredients".
- 6. No data were submitted for guidelines 830.6317 (storage stability) and 830.6320 (corrosion characteristics). These tests must be conducted in the commercial containers. It is recommended that the observations should be made at 0, 3, 6, 9, and 12 month intervals.
- The proposed product with File Symbol No. 83100-ET was found to be substantially similar to the cited product with Reg. No. 352-384 from the product chemistry point of view.
- 8. The proposed label was screened as it pertains to the product chemistry requirements. The final review of the proposed label and uses are the purview of the RM team.

#### DATA EVALUATION RECORD

# METHOMYL (Rotam Methomyl 29% LV Insecticide)

STUDY TYPES: Product Identity and Composition (OPPTS 830.1550)

Description of Materials Used to Produce the Product (OPPTS 830.1600)

Description of Production Process (830.1620)

Discussion of Formation of Impurities (OPPTS 830.1670)

Preliminary Analysis (OPPTS 830.1700) Certified Limits (OPPTS 830.1750)

**Enforcement Analytical Method (OPPTS 830.1800)** 

Physical and Chemical Characteristics (OPPTS 830.6302-830.7950)

# MRIDs 482239-01 through 482239-03

Prepared for Registration Division Office of Pesticide Programs U.S. Environmental Protection Agency One Potomac Yard 2777 South Crystal Drive Arlington, VA 22202

Prepared by Toxicology and Hazard Assessment Group **Environmental Sciences Division** Oak Ridge National Laboratory Oak Ridge, TN 37831 Task Order No. 1-69

Primary Reviewer:

Eric B. Lewis, M.S.

Secondary Reviewers:

Sylvia Milanez, Ph.D., D.A.B.T.

Cheryl B. Bast, Ph.D., D.A.B.T., Group Leader

Quality Assurance:

Kimberly G. Slusher, M.S.

Signature:

Date:

Signature:

Date:

Signature:

Date:

Signature:

Date:

Disclaimer

This review may have been altered subsequent to the contractor's signatures above.

Oak Ridge National Laboratory managed and operated by UT-Battelle, LLC., for the U.S. Department of Energy under Contract No. DE-AC05-00OR22725.



RE: methomyl 83100: few quick corrections and we'll be done

Frank Sobotka o Thomas Harris

04/05/2011 03:26 PM

Revised labels per your comments.

Dr. Frank E. Sobotka, Senior Partner IPM Resources LLC 4032 Crockers Lake Blvd. Suite 818 Sarasota, FL 34238 PH: 215 497-9501

FX: 215 497-9502

> Subject: methomyl 83100: few quick corrections and we'll be done > From: harris.thomas@epamail.epa.gov \*Personal privacy information\* > Date: Tue, 5 Apr 2011 13:58:34 -0400 > Dr. Sobotka, > Almost there. Just a couple of quick things. Just email me back the > labels. I'll wrap them up when I get back from a meeting at 3pm. > 83100-ET > DFU/crop table - a) Pull down bottom line on header (it's obscuring > the units) and b) repeat header row on all pages. > > 83100-EI > Precautionary/PPE, pp 4, 37 (two occurrences) - Respirator not quite > right. > a) Delete "For exposure in enclosed areas:" > b) Delete last sentence "Dust/mist filtering respirator ...." > In the label filenames just put a "b" right after the date but before > the period. This will distinguish the label from this morning's > version. > Tom Harris > EPA/OCSPP/OPP/RD/IRB > voice: (703) 308-9423 > fax: (703) 308-0029 > harris.thomas@epa.gov > visit http://www.epa.gov/pesticides





# methomyl 83100: few quick corrections and we'll be done



Thomas Harris o Frank Sobotka

04/05/2011 01:58 PM

Dr. Sobotka,

Almost there. Just a couple of quick things. Just email me back the labels. I'll wrap them up when I get back from a meeting at 3pm.

DFU/crop table - a) Pull down bottom line on header (it's obscuring the units) and b) repeat header row on all pages.

# 83100-EI

Precautionary/PPE, pp 4, 37 (two occurrences) - Respirator not quite right.

a) Delete "For exposure in enclosed areas:"

b) Delete last sentence "Dust/mist filtering respirator ...."

In the label filenames just put a "b" right after the date but before the period. This will distinguish the label from this morning's version.

Tom Harris EPA/OCSPP/OPP/RD/IRB voice: (703) 308-9423 fax: (703) 308-0029

harris.thomas@epa.gov

visit http://www.epa.gov/pesticides

# RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP

1A

INSECTICIDE

# Rotam Methomyl 29LV Insecticide

# Water Soluble Liquid

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient	By Weight
Methomyl (S-methyl-N-[(methylcarbapioyloxy]thioacetimidate)	) 29%
Other Ingredients	71%
TOTAL Contains Methonol	100%

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[Placeholder to identify Container type]

EPA Reg. No. 83100 - 27

EPA Est. No.: 5905-GA-01

KEEP OUT OF REACH OF CHILDREN DANGER POISON



PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional Precautionary Statements on inside booklet and back panel of container and Directions for Use on inside booklet.

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

**Net Contents** Gallons TBA

[Booklet Cover]

# **PULL HERE TO OPEN▶**

# RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP

1A

INSECTICIDE

# Rotam Methomyl 29LV Insecticide

# KEEP OUT OF REACH OF CHILDREN DANGER POISON



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# Water Soluble Liquid

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient	By Weight
Methomyl	
(S-methyl-N-[(methylcarbamoyl)	200/
oxy]thioacetimidate)	29%
Other Ingredients	71%
TOTAL	100%
Contains Methanol	

[Placeholder to identify Container type]

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# FIRST AID (N-Methyl Carbamate insecticide)

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

# ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

**POISONING SYMPTOMS** — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section and seek medical attention at once.

#### NOTE TO PHYSICIAN

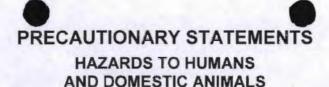
Probable mucosal damage may contraindicate the use of gastric lavage.

**TREATMENT** — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact the National Poison Control Center 24-hr Emergency Hotline at: 1-800-222-1222.



# KEEP OUT OF REACH OF CHILDREN

DANGER

POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Restricted Use Pesticide due to toxicity categories. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Contains Methanol. Methanol may cause blindness. Causes irreversible eye damage. May be fatal if swallowed or if inhaled. Harmful if absorbed through skin. Do not get in eyes or on clothing. Do not breathe spray mist. Avoid contact with skin.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, cleaners, repairers of application equipment, and others exposed to the concentrate must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as natural rubber or other materials in EPA category C.
- Socks and chemical resistant footwear.
- · Protective evewear.
- Chemical resistant apron.
- Respirator with either an organic vapor-removing cartridge with a prefilter
  approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a
  canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G),
  or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister
  with any R, P, or HE prefilter.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **ENGINEERING CONTROL STATEMENTS**

Human flaggers must be in enclosed cabs.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must not assist in the mixing and loading operations.

# USER SAFETY RECOMMENDATIONS USERS SHOULD:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove personal protective equipment immediately after handling this product.
- · Wash the outside of gloves before removing.
- · As soon as possible, wash thoroughly and change into clean clothing.
- Remove and wash contaminated clothing before reuse.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean highwater mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

### PHYSICAL AND CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation. The product shows potential explosive properties when heated to elevated temperatures.

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# DIRECTIONS FOR USE Restricted Use Pesticide

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). REI Summary: REI peaches = 4 day; REI apple, cotton, grapefruit, lemon, nectarine, orange, tangelo, tangerine = 3 day; all other WPS uses = 48 hour REI.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls.

Chemical-resistant gloves, such as barrier laminate or butyl rubber. Shoes plus socks.

Protective eyewear.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Do not formulate this product into other end-use products without written permission from Rotam.

ROTAM METHOMYL 29LV insecticide should be used only in accordance with directions for use on this label or in separate Rotam supplemental labeling. Rotam will not be responsible for use of the product in a manner not specified by Rotam in the product's labeling and User assumes all risk for such use.

ROTAM METHOMYL 29LV is a water soluble liquid that is applied by foliar application to control many important insect pests. ROTAM METHOMYL 29LV is mixed with water for application.

Do not apply thru Drip Chemigation unless accompanied by Rotam Supplemental Labeling.

Pilots must not assist in the mixing and loading operations.

Do not apply by ground equipment within 25 feet, or by air within 100 feet of lakes, reservoirs, rivers, estuaries, commercial fish ponds and natural, permanent streams, marshes or natural, permanent ponds. Increase the buffer zone to 450 feet from the above aquatic areas when ultra low volume application is made.

Hand-held equipment is prohibited for applications to crops. This product must be applied to crops only with mechanical ground, overhead sprinkler chemigation or aerial application equipment.

Use only in commercial and farm plantings. Not for use in home plantings. Not for use during any period after a commercial crop site is opened for public entry as a "U-Pick", "Pick Your Own" or similar operation; in no case shall preharvest applications be made after first public entry. The restricted entry interval and preharvest interval for the crop stated elsewhere on this label must be followed.

# RESISTANCE MANAGEMENT

For resistance management, ROTAM METHOMYL 29LV insecticide is a group 1A insecticide. Repeated and exclusive use of ROTAM METHOMYL 29LV or other group 1A insecticides may lead to the build-up of resistant strains of insects in some crops. Not all members of this group have been shown to be cross-resistant. Different resistance mechanisms that are not linked to target site of action, such as enhanced metabolism, are common for this group of chemicals. Alternation of compounds from different sub-groups within this group may be an acceptable part of an integrated pest management program.

Some insects are known to develop resistance to products used repeatedly for control. When this occurs, the recommended dosages fail to suppress the pest population below the economic threshold. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org.

#### INTEGRATED PEST MANAGEMENT

This product should be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult

your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

#### SCOUTING

Monitor insect populations to determine whether or not there is a need for application of ROTAM METHOMYL 29LV based on locally determined economic thresholds. More than one treatment of ROTAM METHOMYL 29LV may be required to control a population of pests.

### BENEFICIAL ARTHROPODS

ROTAM METHOMYL 29LV at rates of 2/5 to 3/4 pint per acre helps conserve certain beneficials, including big-eyed bugs, damsel bugs, flower bugs and spiders in cotton and soybeans. While these beneficials cannot be relied upon to control pests, they are of potential value and should be monitored along with pests in pest management programs on these crops.

#### SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying ROTAM METHOMYL 29LV.

Fill spray tank 1/4 to 1/2 full of water. Add ROTAM METHOMYL 29LV directly to spray tank. Mix thoroughly. Use mechanical or hydraulic means; do not use air agitation. Spray mix should not be stored overnight in spray tank.

Compatibility — Since formulations may be changed and new ones introduced, in this situation users can premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.) before applying the product. Avoid mixtures of several materials and very concentrated spray mixtures.

Do not use ROTAM METHOMYL 29LV with Bordeaux mixture (copper sulfate and hydrated lime), Du Ter triphenyltin hydroxide, lime sulfur, Rayplex iron nor in highly alkaline solutions. Use mildly alkaline mixtures immediately after mixing to prevent loss of insecticidal activity.

**Tank Mix Sequence** – Add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after addition of each product.

- 1. Water soluble bags.
- Water dispersible granules.
- 3. Wettable powders.
- 4. Water based suspension concentrates.
- 5. ROTAM METHOMYL 29LV and other water soluble concentrates.
- 6. Oil based suspension concentrates.
- 7. Emulsifiable concentrates.
- 8. Adjuvants, surfactants, oils, soluble fertilizers, and drift retardants. Follow local practice and manufacturer's recommendation.

# **APPLICATION**

Apply at the recommended rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Follow-up treatments of ROTAM METHOMYL 29LV should be applied, as needed, to keep pest populations within threshold limits. On most crops, ROTAM METHOMYL 29LV should be applied at 5 to 7 day intervals to maintain control. Refer to crop specific directions for use in the crop tables for more specific information on treatment intervals.

Use sufficient water to obtain thorough, uniform coverage. Since ROTAM METHOMYL 29LV is a fast acting contact insecticide, best results follow direct spraying of the target insect.

For aerial, use a minimum of 2 gals, per acre (gpa) except 10 gpa for peaches and nectarines; 15 gpa for oranges, lemons, grapefruit, tangelos and tangerines.

ROTAM METHOMYL 29LV is recommended for use as a low volume aerial spray 0.53 gpa (2L) for cotton\* and soybeans\* and 1 gpa for the crops listed below providing the following conditions are met:

- equipment is adjusted to distribute spray uniformly over the spray swath,
- wind conditions and other factors such as temperature and humidity are such
- -that the spray is delivered to the target area,
- -local regulations do not prohibit low-volume aerial sprays,
- -use rates are applied as directed on the package label or supplemental labeling for the following crops:

Alfalfa Peas (succulent) Celery Anise Collards Peppermint Peppers Asparagus Corn Potato Barley Cotton Beans Cucumber Rye Broccoli Soybean Lettuce Brussels sprouts Melons Spinach Cabbage Mint Sugar beet Summer Squash Carrot Oats Cauliflower Peanuts Wheat

Apply the low rates on small plants, small insects and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use 1 to 3 applications of the highest recommended rate for controlling severe infestations. Thereafter, use the lowest rate possible to maintain control.

### SPRAY TANK CLEANOUT

Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

<sup>\*</sup> Not Registered for aerial application in a diluted volume of less than 1 gal in CA.

CHEMIGATION

Instructions for the Use of ROTAM METHOMYL 29LV on Alfalfa, Barley, Oats, Green and Dry Bulb Onions, Potatoes, Rye, Sugar Beets and Wheat Using Overhead Sprinkler Chemigation

Do not apply thru Drip Chemigation unless accompanied by Rotam Supplemental Labeling.

Chemigation: Overhead sprinkler chemigation is allowed for use in alfalfa, barley, succulent and dry beans, oats, onions, succulent peas, potatoes, rye, sugar beets, sweet corn and wheat. Do not apply this product through any other type of irrigation systems, except those allowed by instructions provided in supplemental labeling.

Overhead chemigation applications offer the advantage of greater penetration and coverage of the target plant. However, typical chemigation applications are more dilute than ground or aerial applications. For best results, it is recommended to keep the concentration of ROTAM METHOMYL 29LV as high as possible in the application. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre.

ROTAM METHOMYL 29LV is most active as a contact insecticide, although it does also have activity via ingestion of treated plants. For best results, applications of ROTAM METHOMYL 29LV should take place when the insects are active and most likely to come into direct contact with the application.

Types of Irrigation Systems:

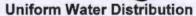
ROTAM METHOMYL 29LV may be applied through overhead sprinkler irrigation systems for control of various pests. The irrigation system used must provide uniform water distribution. Do not use filter screens smaller than 50 mesh throughout the system, due to possible build up of material on 100 mesh or smaller screens. Do not apply ROTAM METHOMYL 29LV through any other type of irrigation systems, except those allowed by instructions provided in a supplemental, SLN, or this product label.

# General Directions for Chemigation: Preparation

A pesticide tank is recommended for the application of ROTAM METHOMYL 29LV in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Add 1/4 to 1/2 of the desired amount of water and then measure the required amount of ROTAM METHOMYL 29LV into the tank. Complete filling the tank by adding the required amount of water. Agitate thoroughly to insure a uniform solution of ROTAM METHOMYL 29LV. Once in solution, no further agitation is required. Injection solution should not be stored overnight. Highly alkaline water should be buffered so that the pH of the spray solution is in the range of neutral to slightly acidic (pH5-7).

Injection Into Chemigation Systems

Inject the proper amount of the ROTAM METHOMYL 29LV.solution into the irrigation water flow using a positive displacement injection pump. Injection should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water.



The irrigation system used for application of ROTAM METHOMYL 29LV must provide for uniform distribution of ROTAM METHOMYL 29LV treated water. Non-uniform distribution might result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.

# **Equipment calibration**

Calibrate the irrigation system and injector before applying ROTAM METHOMYL 29LV. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, you should contact your state extension service specialists, equipment manufacturer or other experts.

# **Monitoring of Chemigation Applications**

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for cleaners and repairers of application equipment when making adjustments or repairs on the chemigation system when ROTAM METHOMYL 29LV is in the irrigation water.

# Required System Safety Devices

Do not connect any irrigation system used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

7. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction.

There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

# Posting of Areas to be Treated

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any other public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to all the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The signs shall be printed in ENGLISH. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color, which sharply contrasts with their immediate background. At the top of the sign shall be the words "KEEP OUT", followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word "STOP". Below the symbol shall be the words "PESTICIDE IN IRRIGATED WATER".

Posting for chemigation does not replace other posting and reentry requirements for farm worker safety.

#### Operation

Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injection system according to the directions above. This procedure is necessary to deliver the desired rate per acre in a uniform manner. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system. End guns must be turned off during the application, if they irrigate nontarget areas or if they do not provide uniform application and coverage.

Nozzles in the immediate area of control panels, chemical supply tanks, wellheads and system safety devices must be plugged to prevent contamination of these areas.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Do not apply when system connections or fittings leak or when nozzles do not provide uniform distribution.

### Cleaning the System

Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner's manual or your local equipment dealer for cleanout procedures for your injection system.

# SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

 The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

# AERIAL DRIFT REDUCTION ADVISORY INFORMATION Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

# Controlling Droplet Size - General Techniques

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle.
   Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

### Controlling Droplet Size - Aircraft

 Number of Nozzles - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.

- Nozzle Orientation Orienting nozzles so that the spray is released parallel
  to the airstream produces larger droplets than other orientations and is the
  recommended practice. Significant deflection from horizontal will reduce
  droplet size and increase drift potential.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types and the lowest drift.
- Boom Length For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- Application Height Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
- Swath Adjustment When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downward edges of the fields, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

# **BOOM HEIGHT**

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. AVOID GUSTY OR WINDLESS CONDITIONS.

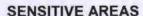
**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

### **TEMPERATURE INVERSIONS**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.



The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

# AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

**Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

# AIR ASSISTED (AIR BLAST) TREE AND VINE SPRAYERS

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides. In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift...

Adjust deflectors and aiming devices so that spray is only directed into the canopy.

Block off upward pointed nozzles when there is no overhanging canopy.

Use only enough air volume to penetrate the canopy and provide good coverage.

Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

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Crops	Insects	1	Rate ROTAM METHOMYL 29LV	Last Application -Days To Harvest	REI
Alfalfa	Pea Aphid Lygus Bugs Blotch Leafminer Aphids Egyptian Alfalfa Weevil Larvae Loopers Beet Armyworm Armyworm Alfalfa Caterpillar	3	1 1/2 -	7*	48 hrs

	Fall Armyworm Western Yellowstriped Armyworm Yellowstriped Armyworm			
	Alfalfa Weevil Larvae	3		
	Variegated Cutworm  Do not apply to dormant or semi-dorn	3/4 - 3	num daily temp is 50° E	
	or lower.  Do not apply more than 12 pints of Red Do not make more than 10 application. Chemigation: ROTAM METHOMYL 2 chemigation. For best results, use the 29LV. Apply in 0.1 to 0.2 inches of warmore information.  *Do not apply within 7 days of cutting or a	OTAM METHOMYL 29 ns per crop. 19LV may be applied by thighest listed rate of l ater per acre. See CHE	OLV per acre per crop.  y overhead sprinkler  ROTAM METHOMYL  EMIGATION section for	
Anise (Fennel)	Cabbage Looper	3	7	48 hrs
ov (i omioi)	Beet Armyworm	1 1/2 - 3		50,000
	Do not apply more than 15 pints of Re Do not make more than 10 application	OTAM METHOMYL 29	DLV per acre per crop.	
	Apple Aphid Rosy Apple Aphid Tufted Apple Budmoth Green Fruitworm Tarnished Plant Bug	1 1/2 - 3 *	14	72 hrs
	Codling Moth (10-12 day spray intervals)			
Apple Ground application only	Leafrollers (Fruit-tree, Obliquebanded, Redbanded, Variegated) Lesser Appleworm White Apple Leafhopper Tentiform Leafminer Cutworm	3 *		
	Do not use on Early Macintosh & We Do not apply more than 15 pints of RO Do not make more than 5 applications treatments is 7 days.  * Apply in a minimum of 50 gallons of	OTÁM METHOMYL 29 s per crop; minimum in		
Asparagus	Beet Armyworm Western Yellowstriped Armyworm Asparagus Beetle Spotted Asparagus Beetle White Cutworm Redbacked Cutworm	1 1/2 - 3	1 .	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.			
Avocado	Western Avocado Leafroller Omnivorous Looper	1 1/2 - 3	1	48 hrs

	Do not apply more than 3 pin Do not make more than 2 app		MYL 29LV per acre per crop.	
	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
Barley	*Cereal leaf beetle: ROTAM I cereal leaf beetle eggs when be timed to correspond with t egg hatch to achieve maximu currently registered in Califor *Aphids: For aphid control, cadverse environmental conditions.	ations per crop. HOMYL 29LV may be a , use the highest listed les of water per acre. S  METHOMYL 29LV can applied according to la the appearance of newly m ovicidal effect. Use on italia.  Irop must be actively grations (such as, extreme	pplied by overhead sprinkler rate of ROTAM METHOMYL see CHEMIGATION section for provide contact ovicidal effect on bel directions. Application should y laid eggs or in anticipation of on this pest stage (egg) is not rowing and not under stress from	
Beans (Succulent)		3/4 – 3	Succulent Beans -	48 hrs
Kidney	Leafhopper		3/4 - 1 1/2 pts 1, over 1 1/2 pts 3;	
Lima Mung Navy Pinto	Mexican Bean Beetle		3 - Vines	
		1 1/2	7 - Hay	FAL.
Snap Wax	Fall Armyworm Variegated Cutworm	1 1/2		
Broad Fava Asparagus Blackeyed peas Cowpeas Chick peas Garbanzo beans Sweet lupine White sweet lupine White lupine Grain lupine	Beet Armyworm Corn Earworm Saltmarsh Caterpillar Yellowstriped Armyworm Western Yellowstriped Armyw Lygus Bugs Thrips Aphids Loopers*	1 1/2 - 3		
	European Corn Borer (Ovicide & Larvicide) Initial when moth flights first appleand-continue preventive treatments at 3-4 day intention To control eggs and larvae	ear vals		
	Spotted Cucumber Beetle	3/4 – 1 1/2	Manager 1	
	Do not apply more than 15 pi Do not make more than 10 ap * Do not use for Loopers in A	oplications per crop.	MYL 29LV per acre per crop.	
Beans (Dry)	(Same as Succulent Beans)	(Same as	14 - Dry Beans *	48 hrs

	Do not apply more than 15 p Do not make more than 10 a Do not use for Loopers in AL *Do not apply within 14 days	ipplications per crop. . & GA.	TOWITE 29EV/AGIE /GIOP.			
Beets (Table)	Imported Cabbageworm	3/4 – 3	0 - roots	48 hrs		
	Beet Armyworm Cabbage Looper Diamondback Moth	1 1/2 - 3	10 -tops			
	Cucumber Beetle Variegated Cutworm	1 1/2				
	Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 8 applications per crop.					
Bermudagrass pasture	Fall Armyworm Armyworm Striped Grass Looper	3/4 - 3	7 - Forage * 3 - Dehydrated Hay **	48 hrs		
	Do not apply more than 3 pir Do not make more than 4 ap * Do not apply within 7 days ** Do not apply within 3 days	plications per crop. of feeding forage or a	OMYL 29LV per acre per crop.			
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil Sharp-Nosed Leafhopper	1 1/2	3	48 hrs		
	Cranberry Fruitworm* Cherry Fruitworm*	1 1/2 – 3				
	Flea Beetle (larvae) Sawfly (larvae) Blueberry Leafroller	3				
	Blueberry Maggot	3/4-1 1/2				
Broccoli	Do not apply during bloom. Do not apply more than 12 p not make more than 4 applice * For ground use only.  Loopers Diamondback Moth Imported Cabbageworm		HOMYL 29LV per acre per crop. Do	48 hrs		
	Do not apply more than 21 pints of ROTAM METHOMYL29LV/acre/crop Do not make more than 10 applications per crop; minimum interval between treatments is 2 days.  ** Add a wetting agent to improve coverage.					
Brussels Sprouts	Loopers Imported Cabbageworm Diamondback Moth	1 1/2 – 3 **	3	48 hrs		
	Variegated Cutworm	1 1/2 **				
	Do not apply more than 18 p Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to imp	pplications per crop;	HOMYL 29LV per acre per crop. minimum interval between			

Cabbage	Loopers * Diamondback Moth Fall Armyworm	1 1/2 - 3 **	1	48 hrs
	Imported Cabbageworm	3/4 - 3 **		
	Variegated Cutworm	1 1/2 **		
	Do not apply more than 24 pi Do not make more than 15 appli days.  * Do not use for Loopers in A  ** Add a wetting agent to imp	cations per crop; minimum  L & GA.	IYL 29LV per acre per crop. interval between treatments is 2	
Carrot	Beet Armyworm Armyworms Aster Leafhopper	1 1/2 - 3	1	48 hrs
	Variegated Cutworm	3/4 - 1 1/2		
	Do not apply more than 21 pi Do not make more than 10 ap		IYL 29LV per acre per crop.	
Cauliflower	Imported Cabbageworm	3/4 - 3 **	3	48 hrs
	Loopers Diamondback Moth	1 1/2 – 3 **		
	Variegated Cutworm	1 1/2 **		
	Do not apply more than 24 pi Do not make more than 10 ap treatments is 2 days. ** Add a wetting agent to imp	oplications per crop; mini		
Celery	Beet Armyworm Aster Leafhopper	1 1/2 – 3	7	48 hrs
	Loopers	3		
	Variegated Cutworm	1 1/2		
	Armyworms	3/4 - 3		
	Do not apply more than 24 pi Do not make more than 10 ap		IYL 29LV per acre per crop.	
Chicory	Beet Armyworm Variegated Cutworm Leafhoppers	1 1/2 - 3	80	48 hrs
	Do not apply more than 6 pin Do not make more than 2 app		/L 29LV per acre per crop.	
	Loopers Beet Armyworm	1 1/2 - 3*	10	48 hrs
Chinese Cabbage	Do not apply more than 24 pi Do not make more than 10 ap * Minimum of 25 gallons water	oplications per crop.		
Collards (Fresh market only)	Diamondback Moth Variegated Cutworm	1 1/2	10	48 hrs
	Imported Cabbageworm Beet Armyworm Loopers*	1 1/2 - 3		
	Do not apply when temp. is lest Do not apply when crop is lest Do not apply more than 18 pin Do not make more than 8 appression and the second	s than 10" tall. nts of ROTAM METHOM plications per crop.	IYL 29LV per acre per crop.	

Corn (Field,	Earworm -		21 - Ears	
Popcorn & Seed)	(Ovicide/Larvicide) Armyworm Fall Armyworm European Corn Borer Ears 1-3 days or as needed Corn Rootworm (adult beetles) Flea Beetles Picnic Beetles Aphids	3/4 – 1 1/2	3 - Forage* 21 - Stover*	48 hrs
	Variegated Cutworm, Beet Armyworm	1 1/2		
	Do not apply more than 7.5 pints of Do not make more than 10 applica *Corn forage is green actively grow The plants can be fed directly to an parts of the plant that remain after remaining stalks and leaves can be	tions per crop. ving plants that are nimals or used to m removal of the grai	harvested with the ears intact. hake silage. Corn stover are the n at full plant maturity. These	
Corn (Swoot)	EarwormWhorl as needed	1 – 1 1/2	0 -Ears	48 hrs
Corn (Sweet)	Fall Armyworm Armyworm Earworm, (Ovicide/Larvicide) European Corn Borer -Ears 1-3 days or as needed Corn Rootworm (adult beetles) Flea Beetles Picnic Beetles Aphids	3/4 – 1 1/2	3 - Forage 21 - Stover	
	Variegated Cutworm Beet Armyworm	1 1/2		
	Certain hybrid varieties of sweet of Treat a small area to determine crops not apply more than 21 pints of Do not make more than 28 applicate treatments is 1 day.	op safety before full ROTAM METHON	I scale spraying.  IYL 29LV per acre per crop.	
Cotton – All US	Ovicide/Larvicide - Bollworm Tobacco Budworm (Initiate schedule when significant numbers of eggs are present Continue at 3 to 5-day intervals while eggs are present and larval control is adequate. If significant larvae survive, use higher rates below.) Lygus Bugs/Plant Bugs (adults and nymphs) Start treatment on low level population for suppression.	2/5 - 3/4 (see Insect Predator Section)	15	72 hrs
				1
	Cotton Leafworm	3/4 - 1 1/2		

	(as needed)	214		
	Aphids, Thrips	3/4		
East of Rockies only	(Early Season) Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/PlantBugs (adults and nymphs) Use as occasional spray in regular schedule but not more often than every 10 days. (Late Season) Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/Plant Bugs (adult and nymphs) Up to 3 applications at 3-5	1 1/2 - 2 1/4		
Texas	day intervals after desired boll load set on plants.  Cotton Aphid	3/4 – 2		
West of Rockies	Larvicide for worms:	1 1/2 - 2 1/4		
only	Bollworm Fall Armyworm Tobacco Budworm Lygus Bugs Beet Armyworm			
	Cotton Leafperforator	1-21/4		
ucumber	For applications West of the Roc desired boll load set on plants.  For all applications made to co Do not apply more than 6 pints or Do not make more than 8 application application of the Roccast Do not graze or feed.  Use may redden cotton. If excess	tton in the United S f ROTAM METHOMY ations per crop. sive, stop or alternate	tates: 'L 29LV per acre per crop. with other insecticides.	
doumber	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm	1 1/2 - 3	1 1/2 pt 1 Over 1 1/2 pt 3	48 hrs
	Pickleworm Fall Armyworm			

Eggplant	Green Peach Aphid	3/4 – 3	5	48 hrs
#	Tomato Pinworm (Ground Application Only) Beet Armyworm Corn Earworm	1 1/2 - 3		
	Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 10 applications per crop.			
Endive, Escarole	Beet Armyworm	1 1/2 - 3	10	48 hrs
	Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.			
Garlic	Beet Armyworm	1 1/2**	7	48 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 6 applications per crop.  ** Add a wetting agent to improve coverage.			
Grapefruit CA, AZ & HI only	Thrips Fruitree Leafroller Orange Tortrix Western Tussock Moth Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Horseradish (Ground	Aphids Thrips	1 1/2	65	48 hrs
application Only)	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Leafy Green Vegetables: Beet (tops) Dandelions, Kale, Mustard Greens, Parsley, Swiss Chard, Turnip Greens	Beet Armyworm Cabbage Looper* Diamondback Moth Imported Cabbageworm	1 1/2 - 3	10	48 hrs
	Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.  * Do not use for Cabbage Loopers in AL & GA.			
Lemon CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Lentils	Western Yellowstriped Armyworm	1 1/2 - 3	21	48 hrs
	Do not apply more than 3 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 2 applications per crop.			
Lettuce	Alfalfa Looper	3/4 - 3	3/4-1 1/2 pt 7	48 hrs
(Head and Leaf varieties)	Thrips Aphids Beet Armyworm Cabbage Looper	1 1/2 - 3	over 1 1/2 pts. – 10	

Waster Committee	Corn Earworm			
	Variegated Cutworm	1 1/2		
	Lettuce (head varieties) Do not apply more than 24 pints Do not make more than 15 applicat days. Lettuce (leaf varieties) Do not apply more than 12 pints Do not make more than 8 applicated treatments is 2 days.	tions per crop; minimu	om interval between treatments is 2  OMYL 29LV per acre per crop.	
Melons Including: Canteloupe Casaba Santa Claus melon Crenshaw melon Honeydew melon Honey balls Persian melon Golden Pershaw melon	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pts 1 day over 1 1/2 pts 3 days	48 hrs
Mango melon Pineapple melon	Variegated Cutworm	1 1/2		
Snake melon Watermelon	Do not apply more than 18 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 12 applications per crop.			
Mint (Peppermint, Spearmint)	Variegated Cutworm Alfalfa Looper	3	14	48 hrs
	Flea Beetles 2 1/4 - 3  Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Nectarine CA & AZ only	Thrips	1 1/2 – 3	1	72 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 3 applications per crop.			
Oats	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs

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	Do not apply more than 6 pints of Do not make more than 4 application: ROTAM METHOM chemigation. For best results, us 29LV. Apply in 0.1 to 0.2 inches more information.	ations per crop. MYL 29LV may be applie se the highest listed rate	ed by overhead sprinkler of ROTAM METHOMYL	
	*Cereal leaf beetle: ROTAM ME cereal leaf beetle eggs when ap be timed to correspond with the egg hatch to achieve maximum currently registered in California **Aphids: For aphid control, cropadverse environmental condition Applications on Russian wheat a (<10 adults per stem).	plied according to label appearance of newly lai ovicidal effect. Use on the must be actively growing (such as, extreme ten	directions. Application should deggs or in anticipation of his pest stage (egg) is not and not under stress from apperatures or drought).	
Onions	Beet Armyworm	1 1/2 - 3**	7 - Green &	48 hrs
(Green & Dry Bulb)	Thrips* Variegated Cutworm Black Cutworm	3**	Dry Bulb Onions	B
	Onions, green  Do not apply more than 18 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop; minimum interval between treatments is 5 days.  Onions, dry bulb  Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop; minimum treatment interval between treatments is 5 days.  *Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation to control thrips. Begin applications before thrips populations reach 3-5 thrips per plant. For best results, use the highest rate of ROTAM METHOMYL 29LV and a wetting agent. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  *** Add a wetting agent to improve coverage.			
Oranges CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Fruittree Leafroller Beet Armyworm Citrus Cutworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Peaches	Catfacing Insects (Plant Bugs and Stink Bugs) - begin at petal fall and continue in cover sprays at 7 to 10-day intervals Oriental Fruit Moth*	3 pt (or 3/4 pt per 100 gal up to 400 gal per acre)	4	4 days

	-begin at petal fall; use trapping devices and frequent field inspection to determine need for treatment. Continue treatment in cover sprays and alternate with residual-type insecticides registered for this use.  Green Peach Aphid			
	Do not apply more than 18 pints Do not make more than 6 applic * Oriental Fruit Moth (Ground Ap	ations per crop.	IYL 29LV per acre per crop.	
Peanuts	Corn Earworm* Potato Leafhopper Fall Armyworm	3/4 – 3	21	48 hrs
	Beet Armyworm	1 1/4 - 3		
	Green Cloverworm Velvetbean Caterpillar Cabbage Looper Soybean Looper ** Thrips Granulate Cutworm	1 1/2 – 3		
Pears	Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 8 applications per crop. Do not feed treated vines.  * ROTAM METHOMYL 29LV has ovicidal and larvicidal control on corn earworm.  **Soybean Looper is difficult to control. Do not apply to worms greater than 1/2" long. Use higher rate for severe infestations.			
		2 2 10 5 2		1
Pears	Green Fruitworm Oblique banded Leafroller	1 1/2 - 3*	7	48 hrs
		of ROTAM METHOMY ations per crop.		48 hrs
Pears Northeast only  Peas (succulent) Including: Pigeon peas Chick peas Garbanzo beans Dwarf peas	Oblique banded Leafroller  Do not apply more than 6 pints of Do not make more than 2 applied * Apply in a minimum of 50 gallot Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar	of ROTAM METHOMY ations per crop.		48 hrs
Peas (succulent) Including: Pigeon peas Chick peas Garbanzo beans Dwarf peas Garden peas Green peas English Peas	Oblique banded Leafroller  Do not apply more than 6 pints of Do not make more than 2 applice * Apply in a minimum of 50 gallows Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm	of ROTAM METHOMY ations per crop. ons of water per acre.	YL 29LV per acre per crop.  1 - Peas 5 - Forage	
Peas (succulent) Including: Pigeon peas Chick peas Garbanzo beans Dwarf peas Garden peas Green peas	Oblique banded Leafroller  Do not apply more than 6 pints of Do not make more than 2 applice * Apply in a minimum of 50 gallor * Apply in a minimum of 50 gallor * Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar Variegated Cutworm  Alfalfa Caterpillar Armyworm	of ROTAM METHOMY ations per crop.  1 1/2 - 3  3/4 - 3  of ROTAM METHOMY ations per crop; minin	/L 29LV per acre per crop.  1 - Peas 5 - Forage 14 - Hay	
Peas (succulent) Including: Pigeon peas Chick peas Garbanzo beans Dwarf peas Garden peas Green peas English Peas Field peas Edible pod peas	Oblique banded Leafroller  Do not apply more than 6 pints of Do not make more than 2 applice * Apply in a minimum of 50 gallot * Apply in a minimum of 50 gallot * Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar Variegated Cutworm  Alfalfa Caterpillar Armyworm Green Cloverworm  Do not apply more than 9 pints of Do not make more than 6 applicated treatments is 3 days.	of ROTAM METHOMY ations per crop.  1 1/2 - 3  3/4 - 3  of ROTAM METHOMY ations per crop; minin	/L 29LV per acre per crop.  1 - Peas 5 - Forage 14 - Hay	
Peas (succulent) Including: Pigeon peas Chick peas Garbanzo beans Dwarf peas Garden peas Green peas English Peas Field peas	Oblique banded Leafroller  Do not apply more than 6 pints of Do not make more than 2 applied * Apply in a minimum of 50 gallor * Apply in a minimum of 50 gallor * Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar Variegated Cutworm  Alfalfa Caterpillar Armyworm Green Cloverworm  Do not apply more than 9 pints of Do not make more than 6 applied treatments is 3 days.  * Do not use for Cabbage Loope	of ROTAM METHOMY ations per crop.  1 1/2 - 3  Of ROTAM METHOMY ations per crop; mining the crop; mining the crop in AL & GA.  1 1/2 - 3  Of ROTAM METHOMY ations per crop; mining the crop; mining the crop in AL & GA.	1 - Peas 5 - Forage 14 - Hay  YL 29LV per acre per crop .  num interval between	48 hrs

Including: Bell Hot Pimentos Sweet	Beet Armyworm Green Peach Aphid Armyworm Fall Armyworm Variegated Cutworm	3/4 – 1 1/2		
Owoci	European Corn Borer	3		
			MYL 29LV per acre per crop.	
Pomegranates	Omnivorous Leafroller	3	14	48 hrs
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 2 applications per crop.			
Potato	Tuberworm* Loopers Aphids Beet Armyworm Leafhoppers Fall Armyworm	1 1/2 – 3	6	48 hrs
	Variegated Cutworm Flea Beetles	1 1/2		
	Do not apply more than 15 pints of ROTAM METHOMYL2 9LV per acre per crop. Do not make more than 10 applications per crop.  Chemigation - ROTAM METHOMYL 29LVmay be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  *Repeat applications of ROTAM METHOMYL 29LV on a 5-7 day schedule, or longer as needed, to control tuber worm populations. An application schedule of effective insecticides with different modes of action may be needed to keep foliar feeding larval populations as low as possible prior to harvest to reduce the risk of larval damage to the tubers. Failure to adequately control tuberworm larvae prior to crop senescence or vine kill increases the risk of tuber damage.			
Rye	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs

	Do not make more than 4 application Chemigation - ROTAM METHOMYL chemigation. For best results, use the 29LV. Apply in 0.1 to 0.2 inches of with more information.  *Cereal leaf beetle: ROTAM METHOM cereal leaf beetle eggs when applied be timed to correspond with the applied be timed to achieve maximum ovicing currently registered in California.  **Aphids: For aphid control, crop musuadverse environmental conditions (supplications on Russian wheat aphid (<10 adults per stem).	as per crop.  29LV may be ap e highest listed ra rater per acre. Se  MYL 29LV can p according to lab earance of newly dal effect. Use or st be actively gro uch as, extreme to	ate of ROTAM METHOMYL se CHEMIGATION section for provide contact ovicidal effect on sel directions. Application should laid eggs or in anticipation of this pest stage (egg) is not leaving and not under stress from temperatures or drought).	
Sorghum	Sorghum Webworm	1 1/2*	14**	48 hrs
Including: Sudangrass (except Sweet Sorghum)	Sorghum MidgeApply when 50% bloom and 3-5 days later if needed. Fall Armyworm (Budworm) Beet Armyworm Corn Earworm Armyworm	3/4 – 1 1/2*		
	Do not apply more than 3 pints of RC Do not make more than 2 application * Minimum of 10 gallons per acre by	ns per crop. ground or 2 gallo		
Caubaana	** Do not apply within 14 days of fee		utting for hay.	40 has
Soybeans		2/5 - 3/4 (see Insect Predator section)		48 hrs
Soybeans	** Do not apply within 14 days of feet Green Cloverworm Velvetbean Caterpillar Mexican Bean Beetle Corn Earworm - Light to moderate	2/5 - 3/4 (see Insect Predator	utting for hay.  14 - Soybeans 3 - Forage	48 hrs
Soybeans	** Do not apply within 14 days of fee  Green Cloverworm  Velvetbean Caterpillar  Mexican Bean Beetle  Corn Earworm -  Light to moderate  Infestations  Corn Earworm -  Moderate to severe	2/5 - 3/4 (see Insect Predator section)	utting for hay.  14 - Soybeans 3 - Forage	48 hrs

Spinach	Alfalfa Looper Cabbage Looper Beet Armyworm Fall Armyworm	1 1/2 - 3	7	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply when minimum daily temp. is 32° F, or lower. Do not apply to seedlings less than 3" diameter. Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 8 applications per crop.			
Sugar Beet	Beet Webworm Flea Beetles Carrion Beetles Beet Armyworm* Aphids* Western Yellowstripe Armyworm*	3/4 - 3	30 - Tops 21- Roots	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 15 pints of Do not make more than 10 applicat *Chemigation - ROTAM METHOM chemigation to control beet armywo For best results, use the highest list 0.1 to 0.2 inches of water per acre. information.	ions per crop. /L 29LV may be orm, aphids and ted rate of ROT	e applied by overhead sprinkler d western yellowstriped armyworm. FAM METHOMYL 29LV. Apply in	
Summer Squash* Including: Crookneck squash Straightneck squash Scallop squash Vegetable marrow Spaghetti squash Hyotan Cucuzza Hechima Chinese okra	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pt 1 day over 1 1/2 pt 3 days	48 hrs
Bitter melon Balsam pear Balsam apple Chinese Cucumber	Do not apply more than 18 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 12 applications per crop.  * Fruit of the Gourd (Cucurbitaceae) family that are consumed when immature, 100% of the fruit is edible cooked or raw, once picked cannot be stored, has a soft rind which is easily penetrated, and if seeds were harvested they would not germinate			
Tangelo, Tangerine CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Tobacco (Except shade)	Flea Beetle Hornworm	3/4 – 1 1/2	5 - Flue cured 14 - Air or fire cured	48 hrs
	Loopers Aphids Tobacco Budworm Fall Armyworm	1 1/2		

Tomoto	Tomata Envitueem			
Tomato (Including Tomatillos*)	Tomato Fruitworm Aphids Hornworm Loopers Beet Armyworm Southern Armyworm Pinworm Armyworm Fall Armyworm	1 1/2 - 3	1	48 hrs
	Variegated Cutworm	1 1/2		
T (Fancisco and and	Do not apply more than 21 pints Do not make more than 16 appl * For tomatillos do not apply mo acre per crop. Do not make more than 5 applic	ications per crop. re than 15 pints of ROTA		
Turf (For use on sod farms only)	Sod Webworm (after application, sprinkle irrigate for 15 minutes)	3 (1.1 fl. ozs. per 1000 sq. ft.)		48 hrs
	Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 4 applications per crop. Do not graze or feed.			
Wheat	Armyworms Cereal Leaf Beetle* Aphids**	3/4 - 1 1/2	7	48 hrs
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 4 applications per crop.  Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  *Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.  **Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought). Applications on Russian wheat aphid need to begin when aphid population is low (<10 adults per stem).			

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only. Not for use or storage in or around the home.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Storage and Disposal Continued

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Pressure rinse as follows: Empty the remaining product contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Insert pressure rinsing nozzle in the container, and rinse at about 40 PSI for at least 30 seconds. Drain rinsate for 10 seconds after the flow begins to drip. Pour or pump rinsate into application equipment or rinsate collection system. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Storage and Disposal Continued

All Refillable Containers: Refillable container. Refilling Container: Refill this container with ROTAM METHOMYL 29LV containing methomyl only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see proceeding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not transport if container is damaged or leaking.

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Rotam Agrochemical Company Limited or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Rotam Agrochemical Company Limited and Seller harmless for any claims relating to such factors.

Rotam Agrochemical Company Limited warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Rotam Agrochemical Company Limited, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW ROTAM LTD MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, Rotam Agrochemical Company Limited or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM AGROCHEMICAL COMPANY LIMITED AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ROTAM AGROCHEMICAL COMPANY LIMITED OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Rotam Agrochemical Company Limited and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Rotam Agrochemical Company Limited.

Manufactured by: 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Registered: [TBA]

[Back Page of Booklet - remains on the container when booklet is removed]

## RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP 1A INSECTICIDE

## Rotam Methomyl 29LV Insecticide

## Water Soluble Liquid

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient	By Weight
Methomyl	
(S-methyl-N-[(methylcarbamoyl)	
oxy]thioacetimidate)	29%
Other Ingredients	71%
TOTAL	100%
Contains Methanol	

[Placeholder to identify Container type]

EPA Reg. No. 83100 - 27

EPA Est. No.: 5905-GA-01

## KEEP OUT OF REACH OF CHILDREN DANGER POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Refer to inside label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations, Engineering Controls Statements, Environmental Hazards and Directions For Use.

## FIRST AID

(N-Methyl Carbamate insecticide)

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

**POISONING SYMPTOMS** — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section and seek medical attention at once.

#### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

TREATMENT — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact the National Poison Control Center 24-hr Emergency Hotline at: 1-800-222-1222.

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS KEEP OUT OF REACH OF CHILDREN

DANGER

POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Restricted Use Pesticide due to toxicity categories. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Contains Methanol. Methanol may cause blindness. Causes irreversible eye damage. May be fatal if swallowed or if inhaled. Harmful if absorbed through skin. Do not get in eyes or on clothing. Do not breathe spray mist. Avoid contact with skin.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, cleaners, repairers of application equipment, and others exposed to the concentrate must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as natural rubber or other materials in EPA category C.
- · Socks and chemical resistant footwear.
- Protective eyewear.
- Chemical resistant apron.
- Respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any R, P, or HE prefilter.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of

equipment washwater or rinsate.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

## PHYSICAL AND CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation. The product shows potential explosive properties when heated to elevated temperatures.

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only. Not for use or storage in or around the home.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Storage and Disposal Continued

#### CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Storage and Disposal Continued

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Pressure rinse as follows: Empty the remaining product contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Insert pressure rinsing nozzle in the container, and rinse at about 40 PSI for at least 30 seconds. Drain rinsate for 10 seconds after the flow begins to drip. Pour or pump rinsate into application equipment or rinsate collection system. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

All Refillable Containers: Refillable container. Refilling Container: Refill this container with ROTAM METHOMYL 29LV containing methomyl only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see proceeding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not transport if container is damaged or leaking.

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Registered: (TBA)

Net Contents Gallons TBA



## Frank Sobotka o Thomas Harris

04/05/2011 10:10 AM

History:

This message has been replied to.

Trust I found and made all the correct changes you indicated on your email. See attached revised labels. Please acknowledge receipt of this email. Thanks,

Dr. Frank E. Sobotka, Senior Partner IPM Resources LLC 4032 Crockers Lake Blvd. Suite 818 Sarasota, FL 34238 PH: 215 497-9501

POF

FX: 215 497-9502



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## a few more corrections for 83100-ET and 83100-EI

Thomas Harris o Frank Sobotka

04/05/2011 05:00 AM

Dr. Sobotka,

Thanks for the revised labels. You did a good job correcting them. I noticed you even found a few errors I had missed (eg. First Aid, If Swallowed). Just a few more corrections. I'll be in meetings for a few hours Tuesday morning so you'll have time to make these changes and email me revised labels.

## 83100-ET

- Front panel(s) Below ingredient statement (all occurrences throughout label) put a placeholder for text to say either "refillable container" or "nonrefillable container". This text is referenced in the Storage Disposal and guides the user to the proper disposal directions.
- 2) Precautionary Statements Delete the personal protective equipment text at the end of the intro paragraph ("Contains methanol. Methanol may cause blindness ...."). This text is not necessary since it is followed by a PPE section. Worse, it conflicts with PPE section in some areas.

Note: It is ok to retain a general reference like "wear protective eyewear" in the Precautionary Statement intro paragraph if you wish to emphasize a particularly important piece of PPE. Just be careful that the text does not conflict with the specific PPE in the PPE section. If in doubt, leave PPE out of intro paragraph.

Note 2: You may have copied this from the acute tox review. Don't. We have a program that writes the text for the review when you enter the acute tox categories but the grammar in the resulting text is terrible and the PPE not entirely complete. Instead, determine the PPE using the acute tox categories and the Label Review Manual.

3) DFU/Crop Directions - In several locations (eg. alfalfa, barley, oats, peas, potato, rye, wheat) you have added two sentences for the concepts to a) use a wetting agent to improve performance, and b) spray at 5-7 day intervals. Where did these come from? I don't see them on the Dupont label. While I normally wouldn't care about directions on optimizing performance, the wetting agent could be a problem. When we set tolerances the residue studies were suppose to have been done either with or without a surfactant as directed on the label. It would be fairly common for residues set without a surfactant to be exceeded when a surfactant is used (i.e. the surfactant often enhances penetration into crop).

Either a) delete these two statements (at least wetting agent one) (all occurrences) if you just added them without similar text on the Dupont label or b) you can leave them if they appear somewhere on the Dupont label.

- 4) DFU/peas Delete chemigation text. This does not occur on the Dupont Sec 3 label. Might be on an SLN or Supplemental but you should not use on Rotam product.
- 5) DFU/Storage and Disposal Looks good; very complete. If you wish, you can delete directions for any type/size container that will not be used by Rotam product. For example, if you will only market in non-refillable 2.5 and 5 gal containers then you do not need the >5 gal or IBC or refillable directions. Up to you.

V

6) p. 38, back page of booklet that remains on container - Delete the current PPE paragraph. Replace with PPE section as per earlier in label on p. 5. As before, current PPE in paragraph does not agree with PPE section (latter is correct).

## 83100-EI

1) Precautionary Statements -

a) Replace intro paragraph with the following which separates hazards and what not to do text:

"Fatal if swallowed. May be fatal if inhaled or gets in eyes. Do not breathe dust. Do not get in eyes. Avoid contact with clothing."

b) Delete washing instructions. Put in separate section per (d) below.

c) Delete the personal protective equipment text at the end of the intro paragraph ("Fatal if swallowed...."). This text is not necessary since it is followed by a PPE section. Worse, it conflicts with PPE section in some areas.

Note: It is ok to retain a general reference like "wear protective eyewear" in the Precautionary Statement intro paragraph if you wish to emphasize a particularly important piece of PPE. Just be careful that the text does not conflict with the specific PPE in the PPE section. If in doubt, leave PPE out of intro paragraph.

d) Add a "User safety recommendations" section as on 83100-ET.

2) Precautionary Statements, PPE - Delete "Respirator as outlined below" bullet, "For exposure in enclosed areas", Start "Respirator" with capital "R", delete "For exposures outdoors." Sorry, I missed these in my initial review.
Note: The "Engineering control" section will provide alternate PPE for normal use of the water soluble packets by mixer/loaders. The PPE section is used by other handlers (applicators, cleaners, etc).

3) DFU/Storage Disposal - If you will only package in water soluble packets in foil liner in a box, you can delete the disposal sections for "fiber drums with liners" and "paper and plastic bags". Dupont uses these for some bulk product but they may not apply to Rotam product. Your choice.

4) p. 38, back page of booklet that remains on container - As in #1 above,

a) Correct intro Precautionary Statements paragraph.

b) Delete washing instructions in intro paragraph.

c) Remove current PPE in intro paragraph in Precautionary Statements.

d) Add a PPE section as on p. 5 earlier in label.

e) Add a "User safety recommendations" section as on 83100-ET.

Excuse the odd hour of sending this. I had reviewed your revised labels yesterday afternoon then brought them home to write/send this email. In the middle of writing the corrections our power went out. Of course, I had not save my corrections as I wrote them! Power just came back on along with all the lights in the house, hence I'm awake! You can be sure I save my writing a dozen times as I composed this email. I'd better send this email before power goes out again.

Tom Harris EPA/OCSPP/OPP/RD/IRB voice: (703) 308-9423 fax: (703) 308-0029



## RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP

## Rotam Methomyl 29LV Insecticide

Water Soluble Liquid

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient	E	y Weight
Methomyl		/
(S-methyl-N-[(methylcarb oxy]thioacetimidate)	amoyl)	29%
Other Ingredients		71%
TOTAL		100%

Contains Methonol

EPA Reg. No. 83100 - 27

needs edim ukl

EPA Est. No.: 5905-GA-01

## KEEP OUT OF REACH OF CHILDREN DANGER POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle/ (If you do not understand the label, find someone to explain it to you in detail.)

See additional Precautionary Statements on inside booklet and back panel of container and Directions for Use on inside booklet.

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

**Net Contents** Gallons TBA



## RESTRICTED USE PESTICIDE

Due to high Acute Toxicity to Humans

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP

1A

INSECTICIDE

## Rotam Methomyl 29LV Insecticide

## KEEP OUT OF REACH OF CHILDREN DANGER POISON



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## Water Soluble Liquid

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient	By Weight
Methomyl	
(S-methyl-N-[(methylcarbamoyl) oxy]thioacetimidate)	29%
Other Ingredients	71%
TOTAL Contains Methanol	100%

EPA Reg. No. 83100 - 27

EPA Est. No.: 5905-GA-01

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Refer to inside for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations, Engineering Controls Statements, Environmental Hazards and Directions for Use

## FIRST AID (N-Methyl Carbamate insecticide)

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

**POISONING SYMPTOMS** — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section and seek medical attention at once.

### **NOTE TO PHYSICIAN**

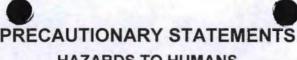
Probable mucosal damage may contraindicate the use of gastric lavage.

**TREATMENT** — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact the National Poison Control Center 24-hr Emergency Hotline at: 1-800-222-1222.



HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## KEEP OUT OF REACH OF CHILDREN

DANGER

POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Restricted Use Pesticide due to toxicity categories. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Contains Methanol. Methanol may cause blindness. Causes irreversible eye damage. May be fatal if swallowed or if inhaled. Harmful if absorbed through skin. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Do not breathe spray mist. Avoid contact with skin.

Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Natural Rubber, Selection Category C). For handling activities, applicators must wear a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any R, P, or HE prefilter.

## PRECAUTIONARY STATEMENTS (Continued) HAZARDS TO HUMANS AND DOMESTIC ANIMALS

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, cleaners, repairers of application equipment, and others exposed to the concentrate must wear:

Long-sleeved shirt and long pants.

Chemical-resistant gloves, such as natural rubber or other materials in EPA category C.

Socks and chemical resistant footwear.

Protective eyewear.

Chemical resistant apron.

Respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any R, P, or HE prefilter.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **ENGINEERING CONTROL STATEMENTS**

Human flaggers must be in enclosed cabs.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must not assist in the mixing and loading operations.

## USER SAFETY RECOMMENDATIONS USERS SHOULD:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- · Remove personal protective equipment immediately after handling this product.
- Wash the outside of gloves before removing.
- As soon as possible, wash thoroughly and change into clean clothing.
- Remove and wash contaminated clothing before reuse.

## **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean highwater mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

### PHYSICAL AND CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation. The product shows potential explosive properties when heated to elevated temperatures.

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## DIRECTIONS FOR USE Restricted Use Pesticide

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). REI Summary: REI peaches = 4 day; REI apple, cotton, grapefruit, lemon, nectarine, orange, tangelo, tangerine = 3 day; all other WPS uses = 48 hour REI.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls.

Chemical-resistant gloves, such as barrier laminate or butyl rubber. Shoes plus socks.

Protective evewear.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Do not formulate this product into other end-use products without written permission from Rotam.

ROTAM METHOMYL 29LV insecticide should be used only in accordance with directions for use on this label or in separate Rotam supplemental labeling. Rotam will not be responsible for use of the product in a manner not specified by Rotam in the product's labeling and User assumes all risk for such use.

ROTAM METHOMYL 29LV is a water soluble liquid that is applied by foliar application to control many important insect pests. ROTAM METHOMYL 29LV is mixed with water for application.

Do not use for Drip Chemigation unless accompanied by Rotam supplemental Labeling.

Pilots must not assist in the mixing and loading operations.

Do not apply by ground equipment within 25 feet, or by air within 100 feet of lakes, reservoirs, rivers, estuaries, commercial fish ponds and natural, permanent streams, marshes or natural, permanent ponds. Increase the buffer zone to 450 feet from the above aquatic areas when ultra low volume application is made.

Hand-held equipment is prohibited for applications to crops. This product must be applied to crops only with mechanical ground, overhead sprinkler chemigation or aerial application equipment.

Use only in commercial and farm plantings. Not for use in home plantings. Not for use during any period after a commercial crop site is opened for public entry as a "U-Pick", "Pick Your Own" or similar operation; in no case shall preharvest applications be made after first public entry. The restricted entry interval and preharvest interval for the crop stated elsewhere on this label must be followed.

## RESISTANCE MANAGEMENT

For resistance management, ROTAM METHOMYL 29LV insecticide is a group 1A insecticide. Repeated and exclusive use of ROTAM METHOMYL 29LV or other group 1A insecticides may lead to the build-up of resistant strains of insects in some crops. Not all members of this group have been shown to be cross-resistant. Different resistance mechanisms that are not linked to target site of action, such as enhanced metabolism, are common for this group of chemicals. Alternation of compounds from different sub-groups within this group may be an acceptable part of an integrated pest management program.

Some insects are known to develop resistance to products used repeatedly for control. When this occurs, the recommended dosages fail to suppress the pest population below the economic threshold. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org.

## INTEGRATED PEST MANAGEMENT

This product should be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection

methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

#### SCOUTING

Monitor insect populations to determine whether or not there is a need for application of ROTAM METHOMYL 29LV based on locally determined economic thresholds. More than one treatment of ROTAM METHOMYL 29LV may be required to control a population of pests.

## BENEFICIAL ARTHROPODS

ROTAM METHOMYL 29LV at rates of 2/5 to 3/4 pint per acre helps conserve certain beneficials, including big-eyed bugs, damsel bugs, flower bugs and spiders in cotton and soybeans. While these beneficials cannot be relied upon to control pests, they are of potential value and should be monitored along with pests in pest management programs on these crops.

## SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying ROTAM METHOMYL 29LV.

Fill spray tank 1/4 to 1/2 full of water. Add ROTAM METHOMYL 29LV directly to spray tank. Mix thoroughly. Use mechanical or hydraulic means; do not use air agitation. Spray mix should not be stored overnight in spray tank.

Compatibility — Since formulations may be changed and new ones introduced, in this situation users can premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.) before applying the product. Avoid mixtures of several materials and very concentrated spray mixtures.

Do not use ROTAM METHOMYL 29LV with Bordeaux mixture (copper sulfate and hydrated lime), Du Ter triphenyltin hydroxide, lime sulfur, Rayplex iron nor in highly alkaline solutions. Use mildly alkaline mixtures immediately after mixing to prevent loss of insecticidal activity.

**Tank Mix Sequence** – Add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after addition of each product.

- Water soluble bags.
- 2. Water dispersible granules.
- 3. Wettable powders.
- Water based suspension concentrates.
- 5. ROTAM METHOMYL 29LV and other water soluble concentrates.
- 6. Oil based suspension concentrates.
- 7. Emulsifiable concentrates.
- 8. Adjuvants, surfactants, oils, soluble fertilizers, and drift retardants. Follow local practice and manufacturer's recommendation.

#### APPLICATION

Apply at the recommended rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate

threshold levels for treatment in your area.

Follow-up treatments of ROTAM METHOMYL 29LV should be applied, as needed, to keep pest populations within threshold limits. On most crops, ROTAM METHOMYL 29LV should be applied at 5 to 7 day intervals to maintain control. Refer to crop specific directions for use in the crop tables for more specific information on treatment intervals.

Use sufficient water to obtain thorough, uniform coverage. Since ROTAM METHOMYL 29LV is a fast acting contact insecticide, best results follow direct spraying of the target insect.

For aerial, use a minimum of 2 gals. per acre (gpa) except 10 gpa for peaches and nectarines; 15 gpa for oranges, lemons, grapefruit, tangelos and tangerines.

ROTAM METHOMYL 29LV is recommended for use as a low volume aerial spray 0.53 gpa (2L) for cotton\* and soybeans\* and 1 gpa for the crops listed below providing the following conditions are met:

- equipment is adjusted to distribute spray uniformly over the spray swath,
- wind conditions and other factors such as temperature and humidity are such
- -that the spray is delivered to the target area,
- -local regulations do not prohibit low-volume aerial sprays,
- -use rates are applied as directed on the package label or supplemental labeling for the following crops:

Alfalfa Celery Peas (succulent) Anise Collards Peppermint Asparagus Corn Peppers Potato Barley Cotton Cucumber Beans Rve Broccoli Lettuce Soybean Brussels sprouts Melons Spinach Sugar beet Cabbage Mint Summer Squash Carrot Oats Cauliflower Peanuts Wheat

Apply the low rates on small plants, small insects and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use 1 to 3 applications of the highest recommended rate for controlling severe infestations. Thereafter, use the lowest rate possible to maintain control.

## SPRAY TANK CLEANOUT

Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local

<sup>\*</sup> Not Registered for aerial application in a diluted volume of less than 1 gal in CA.

regulations.

## CHEMIGATION

Instructions for the Use of ROTAM METHOMYL 29LV on Alfalfa, Barley, Oats, Green and Dry Bulb Onions, Potatoes, Rye, Sugar Beets and Wheat Using Overhead Sprinkler Chemigation

Do not use for Drip Chemigation unless accompanied by Rotam Supplemental Labeling.

Chemigation: Overhead sprinkler chemigation is allowed for use in alfalfa, barley, succulent and dry beans, oats, onions, succulent peas, potatoes, rye, sugar beets, sweet corn and wheat. Do not apply this product through any other type of irrigation systems, except those allowed by instructions provided in supplemental labeling.

Overhead chemigation applications offer the advantage of greater penetration and coverage of the target plant. However, typical chemigation applications are more dilute than ground or aerial applications. For best results, it is recommended to keep the concentration of ROTAM METHOMYL 29LV as high as possible in the application. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre.

ROTAM METHOMYL 29LV is most active as a contact insecticide, although it does also have activity via ingestion of treated plants. For best results, applications of ROTAM METHOMYL 29LV should take place when the insects are active and most likely to come into direct contact with the application.

### Types of Irrigation Systems:

ROTAM METHOMYL 29LV may be applied through overhead sprinkler irrigation systems for control of various pests. The irrigation system used must provide uniform water distribution. Do not use filter screens smaller than 50 mesh throughout the system, due to possible build up of material on 100 mesh or smaller screens. Do not apply ROTAM METHOMYL 29LV through any other type of irrigation systems, except those allowed by instructions provided in a supplemental, SLN, or this product label.

## General Directions for Chemigation: Preparation

A pesticide tank is recommended for the application of ROTAM METHOMYL 29LV in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Add 1/4 to 1/2 of the desired amount of water and then measure the required amount of ROTAM METHOMYL 29LV into the tank. Complete filling the tank by adding the required amount of water. Agitate thoroughly to insure a uniform solution of ROTAM METHOMYL 29LV. Once in solution, no further agitation is required. Injection solution should not be stored overnight. Highly alkaline water should be buffered so that the pH of the spray solution is in the range of neutral to slightly acidic (pH5-7).

## Injection Into Chemigation Systems

Inject the proper amount of the ROTAM METHOMYL 29LV solution into the irrigation water flow using a positive displacement injection pump. Injection

should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water.

#### **Uniform Water Distribution**

The irrigation system used for application of ROTAM METHOMYL 29LV must provide for uniform distribution of ROTAM METHOMYL 29LV treated water. Non-uniform distribution might result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.

## Equipment calibration

Calibrate the irrigation system and injector before applying ROTAM METHOMYL 29LV. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, you should contact your state extension service specialists, equipment manufacturer or other experts.

## **Monitoring of Chemigation Applications**

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for cleaners and repairers of application equipment when making adjustments or repairs on the chemigation system when ROTAM METHOMYL 29LV is in the irrigation water.

## Required System Safety Devices

Do not connect any irrigation system used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials

that are compatible with pesticides and capable of being fitted with a system interlock.

7. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction.

There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

## Posting of Areas to be Treated

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any other public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to all the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The signs shall be printed in ENGLISH. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color, which sharply contrasts with their immediate background. At the top of the sign shall be the words "KEEP OUT", followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word "STOP". Below the symbol shall be the words "PESTICIDE IN IRRIGATED WATER".

Posting for chemigation does not replace other posting and reentry requirements for farm worker safety.

## Operation

Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injection system according to the directions above. This procedure is necessary to deliver the desired rate per acre in a uniform manner. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system. End guns must be turned off during the application, if they irrigate nontarget areas or if they do not provide uniform application and coverage.

Nozzles in the immediate area of control panels, chemical supply tanks, wellheads and system safety devices must be plugged to prevent contamination of these areas.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Do not apply when system connections or fittings leak or when nozzles do not provide uniform distribution.

Cleaning the System

Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner's manual or your local equipment dealer for cleanout procedures for your injection system.

## SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

 The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the <u>Aerial Drift Reduction Advisory Information</u>.

AERIAL DRIFT REDUCTION ADVISORY INFORMATION Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

## **Controlling Droplet Size - General Techniques**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle.
   Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Controlling Droplet Size - Aircraft

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released parallel
  to the airstream produces larger droplets than other orientations and is the
  recommended practice. Significant deflection from horizontal will reduce
  droplet size and increase drift potential.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types and the lowest drift.
- Boom Length For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- Application Height Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
- Swath Adjustment When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downward edges of the fields, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

#### **BOOM HEIGHT**

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. AVOID GUSTY OR WINDLESS CONDITIONS.

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

## **TEMPERATURE AND HUMIDITY**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

## **TEMPERATURE INVERSIONS**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the

movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

## SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

## SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

## AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

**Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

## AIR ASSISTED (AIR BLAST) TREE AND VINE SPRAYERS

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides. In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift..

Adjust deflectors and aiming devices so that spray is only directed into the canopy.

Block off upward pointed nozzles when there is no overhanging canopy.

Use only enough air volume to penetrate the canopy and provide good coverage.

Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	REI
Alfalfa	Pea Aphid Lygus Bugs Blotch Leafminer Aphids Egyptian Alfalfa	1 1/2 - 3	7*	48 hrs

	Weevil Larvae Loopers Beet Armyworm Armyworm Alfalfa Caterpillar Fall Armyworm Western Yellowstriped Armyworm Yellowstriped Armyworm			
	Alfalfa Weevil Larvae	3		
	Variegated Cutworm  Do not apply to dormant or semi-dorm	3/4 - 3		
	or lower.  Do not apply more than 12 pints of RC Do not make more than 10 application Chemigation: ROTAM METHOMYL 2' chemigation. For best results, use the 29LV. Apply in 0.1 to 0.2 inches of wa more information. Use of a wetting agent may improve performation and the sequential applications at 5 to 7 day below threshold.  *Do not apply within 7 days of cutting or a	ns per crop.  9LV may be applie highest listed rate ter per acre. See Commance. hintervals or until wor	of by overhead sprinkler of ROTAM METHOMYL CHEMIGATION section for rm populations are brought	
Anise (Fennel)	Cabbage Looper	3	7	48 hrs
Amse (Fermer)				10 1110
	Beet Armyworm	1 1/2 - 3	0011/ =	
	Do not apply more than 15 pints of RC Do not make more than 10 application		29LV per acre per crop.	
		is per crop.		70 h
	Apple Aphid Rosy Apple Aphid Tufted Apple Budmoth Green Fruitworm Tarnished Plant Bug	1 1/2 - 3 *	14	72 hrs
	Codling Moth (10-12 day spray intervals)			
Apple Ground application only	Leafrollers (Fruit-tree, Obliquebanded, Redbanded, Variegated) Lesser Appleworm White Apple Leafhopper Tentiform Leafminer Cutworm	3*		
	Do not use on Early Macintosh & Weat Do not apply more than 15 pints of RO Do not make more than 5 applications treatments is 7 days.  * Apply in a minimum of 50 gallons of	DTAM METHOMYL s per crop; minimur		
Asparagus	Beet Armyworm Western Yellowstriped Armyworm Asparagus Beetle Spotted Asparagus Beetle White Cutworm Redbacked Cutworm	1 1/2 - 3	1	48 hrs
	Variegated Cutworm	1 1/2		

	Do not apply more than 15 pints of R Do not make more than 8 application		IYL 29LV per acre per crop.	
Avocado	Western Avocado Leafroller Omnivorous Looper	1 1/2 - 3	1	48 hrs
	Do not apply more than 3 pints of RC Do not make more than 2 application		/L 29LV per acre per crop.	
	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hr
Barley	Do not apply more than 6 pints of RO Do not make more than 4 applications per Chemigation: ROTAM METHOMYL chemigation. For best results, use the 29LV. Apply in 0.1 to 0.2 inches of with more information.  Use of a wetting agent may improve to 7 day intervals or until armyworm attreshhold.  *Cereal leaf beetle: ROTAM METHOM cereal leaf beetle eggs when applied be timed to correspond with the appear of the period of the	er crop. 29LV may be ap e highest listed ra eater per acre. Se performance. Mand aphid popula MYL 29LV can performing to lab- earance of newly dal effect. Use or est be actively grouch as, extreme to	plied by overhead sprinkler ate of ROTAM METHOMYL e CHEMIGATION section for ake sequential applications at 5 tions are brought below rovide contact ovicidal effect on el directions. Application should laid eggs or in anticipation of a this pest stage (egg) is not wing and not under stress from temperatures or drought).	
Beans (Succulent) Including: Kidney	Leafhopper	3/4 – 3	Succulent Beans - 3/4 - 1 1/2 pts 1, over 1 1/2 pts 3;	48 hr
Lima Mung Navy	Mexican Bean Beetle		3 - Vines 7 - Hay	
			r - ridy	
Pinto Snap Wax	Fall Armyworm Variegated Cutworm	1 1/2		
Snap Wax Broad Fava Asparagus Blackeyed peas Cowpeas Chick peas Garbanzo beans Sweet lupine White sweet lupine White lupine		1 1/2		
Snap Wax Broad Fava Asparagus Blackeyed peas Cowpeas Chick peas Garbanzo beans Sweet lupine White sweet lupine	Variegated Cutworm  Beet Armyworm Corn Earworm Saltmarsh Caterpillar Yellowstriped Armyworm Western Yellowstriped Armyworm Lygus Bugs Thrips Aphids			

	Do not make more than 10 ap * Do not use for Loopers in A	oplications per crop.	OMYL 29LV per acre per crop.	
Beans (Dry) (Same as Succulent Beans)	(Same as Succulent Beans)	(Same as Succulent Beans)	14 - Dry Beans * 14 - Vines * 14 - Hay *	48 hrs
	Do not apply more than 15 pi make more than 10 application Do not use for Loopers in AL *Do not apply within 14 days	ens per crop. & GA.	OMYL 29LV/acre /crop. Do not	
Beets (Table)	Imported Cabbageworm	3/4 – 3	0 - roots	48 hrs
	Beet Armyworm Cabbage Looper Diamondback Moth	1 1/2 - 3	10 -tops	
	Cucumber Beetle Variegated Cutworm	1 1/2		
	Do not apply more than 12 pi Do not make more than 8 app		OMYL 29LV per acre per crop.	
Bermudagrass pasture	Fall Armyworm Armyworm Striped Grass Looper	3/4 - 3	7 - Forage * 3 - Dehydrated Hay **	48 hrs
	Do not apply more than 3 pin Do not make more than 4 app * Do not apply within 7 days of ** Do not apply within 3 days	olications per crop. of feeding forage or all	MYL 29LV per acre per crop.	
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil Sharp-Nosed Leafhopper	1 1/2	3	48 hrs
	Cranberry Fruitworm* Cherry Fruitworm*	1 1/2 – 3		
	Flea Beetle (larvae) Sawfly (larvae) Blueberry Leafroller	3		
	Blueberry Maggot	3/4-1 1/2		
	Do not apply during bloom. Do not apply more than 12 pin not make more than 4 applicates For ground use only.		OMYL 29LV per acre per crop. Do	
Broccoli	Loopers Diamondback Moth	1 1/2 - 3**	3	48 hrs
	Imported Cabbageworm	3/4 - 3**		
Broccoli	Do not apply more than 21 pints of ROTAM METHOMYL29LV/acre/crop Do not make more than 10 applications per crop; minimum interval between treatments is 2 days.  ** Add a wetting agent to improve coverage.			
	treatments is 2 days.	rove coverage.		

Brussels Sprouts	Imported Cabbageworm Diamondback Moth			
	Variegated Cutworm	1 1/2 **		
	Do not apply more than 18 pin Do not make more than 10 ap treatments is 2 days. ** Add a wetting agent to imp	oplications per crop; min		
Cabbage	Loopers * Diamondback Moth Fall Armyworm	1 1/2 - 3 **	1	48 hrs
	Imported Cabbageworm	3/4 - 3 **		
	Variegated Cutworm	1 1/2 **		
	Do not apply more than 24 pin Do not make more than 15 applic days.  * Do not use for Loopers in Al ** Add a wetting agent to imp	cations per crop; minimum  L & GA.		
Carrot	Beet Armyworm Armyworms Aster Leafhopper	1 1/2 - 3	1	48 hrs
	Variegated Cutworm	3/4 - 1 1/2		
	Do not apply more than 21 pin Do not make more than 10 ap		IYL 29LV per acre per crop.	
Cauliflower	Imported Cabbageworm	3/4 - 3 **	3	48 hr
Caumower	Loopers Diamondback Moth	1 1/2 – 3 **		
	Variegated Cutworm	1 1/2 **		
Celery	Do not apply more than 24 pin Do not make more than 10 apply treatments is 2 days.  ** Add a wetting agent to imple Beet Armyworm	oplications per crop; mini		48 hr
	Aster Leafhopper	-		10111
	Loopers	3		
	Variegated Cutworm	1 1/2		
	Variegated Cutworm Armyworms	1 1/2 3/4 - 3		
		3/4 - 3 nts of ROTAM METHON	IYL 29LV per acre per crop.	
Chicory	Armyworms  Do not apply more than 24 pin Do not make more than 10 apply Beet Armyworm  Variegated Cutworm  Leafhoppers	3/4 - 3 Ints of ROTAM METHON oplications per crop. 1 1/2 - 3	80	48 hr
Chicory	Armyworms  Do not apply more than 24 pin Do not make more than 10 apply more than 10 apply more than 24 pin Do not make more than 24 pin Do not make more than 2 apply more than 3 apply more than 4 apply more th	3/4 - 3 Ints of ROTAM METHOM oplications per crop.  1 1/2 - 3 Its of ROTAM METHOM oblications per crop.	80  YL 29LV per acre per crop.	
Chicory	Armyworms  Do not apply more than 24 pin Do not make more than 10 apply Beet Armyworm  Variegated Cutworm Leafhoppers  Do not apply more than 6 pint	3/4 - 3 Ints of ROTAM METHON oplications per crop. 1 1/2 - 3 Its of ROTAM METHOM	80	
	Armyworms  Do not apply more than 24 pin Do not make more than 10 and Beet Armyworm  Variegated Cutworm  Leafhoppers  Do not apply more than 6 pint Do not make more than 2 apple.	3/4 - 3  Ints of ROTAM METHOM oplications per crop.  1 1/2 - 3  Its of ROTAM METHOM oblications per crop.  1 1/2 - 3*  Ints of ROTAM METHOM oplications per crop.	80  YL 29LV per acre per crop.  10  IYL 29LV per acre per crop.	48 hr
Chicory  Chinese Cabbage  Collards (Fresh market only)	Armyworms  Do not apply more than 24 pin Do not make more than 10 and Beet Armyworm Variegated Cutworm Leafhoppers  Do not apply more than 6 pint Do not make more than 2 apply Loopers Beet Armyworm  Do not apply more than 24 pin Do not make more than 10 apply Do not make Do not make more than 10 apply Do not	3/4 - 3  Ints of ROTAM METHOM oplications per crop.  1 1/2 - 3  Its of ROTAM METHOM oblications per crop.  1 1/2 - 3*  Ints of ROTAM METHOM oplications per crop.	80  YL 29LV per acre per crop.  10  IYL 29LV per acre per crop.	

	Beet Armyworm Loopers*		Daywell &	
	Do not apply when temp. is less the Do not apply when crop is less the Do not apply more than 18 pints of Do not make more than 8 applicates * Do not use for Loopers in AL & Co.	an 10" tall. If ROTAM METHON tions per crop.	MYL 29LV per acre per crop.	
Corn (Field, Popcorn & Seed)	Earworm – (Ovicide/Larvicide) Armyworm Fall Armyworm European Corn Borer Ears 1-3 days or as needed Corn Rootworm (adult beetles) Flea Beetles Picnic Beetles Aphids	3/4 – 1 1/2	21 - Ears 3 - Forage* 21 - Stover*	48 hrs
	Variegated Cutworm, Beet Armyworm	1 1/2		
	*Corn forage is green actively gro The plants can be fed directly to a parts of the plant that remain after remaining stalks and leaves can b  Earworm—Whorl as needed	nimals or used to me removal of the grain	nake silage. Corn stover are the in at full plant maturity. These	48 hrs
Corn (Sweet)	Fall Armyworm Armyworm Earworm, (Ovicide/Larvicide) European Corn Borer -Ears 1-3 days or as needed Corn Rootworm (adult beetles) Flea Beetles Picnic Beetles Aphids	3/4 - 1 1/2	3 - Forage 21 - Stover	30 1110
	Variegated Cutworm Beet Armyworm	1 1/2		
	Certain hybrid varieties of sweet of Treat a small area to determine or	op safety before ful	Il scale spraying.  MYL 29LV per acre per crop.	
	Do not apply more than 21 pints of Do not make more than 28 application treatments is 1 day.		imum interval between	

Tobacco Budworm  Beet Armyworm  Cotton Leafperforator  Fall Armyworm  Lygus Bugs/PlantBugs (adults and nymphs) Use as occasional spray in regular schedule but not more often than every 10 days.  (Late Season)  Bollworm  Tobacco Budworm	1 1/2 – 2 1/4		
Cotton Leafperforator Fall Armyworm Lygus Bugs/Plant Bugs (adult and nymphs) Up to 3 applications at 3-5 day intervals after desired boll load set on plants.			
Cotton Aphid	3/4 – 2		
Larvicide for worms: Bollworm Fall Armyworm Tobacco Budworm Lygus Bugs Beet Armyworm	1 1/2 – 2 1/4		
Cotton Leafperforator	1 – 2 1/4		
CIII CIII	Cotton Leafperforator Fall Armyworm Lygus Bugs/PlantBugs (adults and nymphs) Use as occasional spray in regular schedule but not more often than every 10 days.  (Late Season) Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/Plant Bugs (adult and nymphs) Up to 3 applications at 3-5 day intervals after desired boll load set on plants.  Cotton Aphid Larvicide for worms: Bollworm Tobacco Budworm Lygus Bugs Beet Armyworm Cotton Leafperforator  Cotton Leafperforator	Cotton Leafperforator Fall Armyworm Lygus Bugs/PlantBugs (adults and nymphs) Use as occasional spray in regular schedule but not more often than every 10 days.  (Late Season) Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/Plant Bugs (adult and nymphs) Up to 3 applications at 3-5 day intervals after desired boll load set on plants.  Cotton Aphid  Larvicide for worms: Bollworm Fall Armyworm Tobacco Budworm Lygus Bugs Beet Armyworm Cotton Leafperforator  Tobacco Budworm Lygus Bugs Beet Armyworm Cotton Leafperforator  Toton Leafperforator  Toton Leafperforator  Toton Leafperforator  Toton Leafperforator  Toton Leafperforator  Toton Leafperforator	Cotton Leafperforator Fall Armyworm Lygus Bugs/PlantBugs (adults and nymphs) Use as occasional spray in regular schedule but not more often than every 10 days.  (Late Season) Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/Plant Bugs (adult and nymphs) Up to 3 applications at 3-5 day intervals after desired boll load set on plants.  Cotton Aphid  Larvicide for worms: Bollworm Fall Armyworm Tobacco Budworm Lygus Bugs Beet Armyworm

	Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm			
	Variegated Cutworm	1 1/2		100
	Do not apply more than 18 pints Do not make more than 12 applic		L 29LV per acre per crop.	
Eggplant	Green Peach Aphid	3/4 – 3	5	48 hrs
	Tomato Pinworm (Ground Application Only) Beet Armyworm Corn Earworm	1 1/2 - 3		
	Do not apply more than 15 pints Do not make more than 10 applic		L 29LV per acre per crop.	
	Beet Armyworm	1 1/2 - 3	10	48 hrs
Endive, Escarole	Do not apply more than 15 pints Do not make more than 8 applica		L 29LV per acre per crop.	
Garlic	Beet Armyworm	1 1/2**	7	48 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 6 applications per crop.  ** Add a wetting agent to improve coverage.			
Grapefruit CA, AZ & HI only	Thrips Fruitree Leafroller Orange Tortrix Western Tussock Moth Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints o Do not make more than 4 applica	f ROTAM METHOMYL ations per crop.	29LV per acre per crop.	
Horseradish (Ground	Aphids Thrips	1 1/2	65	48 hrs
application Only)	Do not apply more than 6 pints o Do not make more than 4 applica		29LV per acre per crop.	
Leafy Green Vegetables: Beet (tops) Dandelions, Kale,	Beet Armyworm Cabbage Looper* Diamondback Moth Imported Cabbageworm	1 1/2 - 3	10	48 hrs
Mustard Greens, Parsley, Swiss Chard, Turnip Greens	Do not apply more than 12 pints Do not make more than 8 applica * Do not use for Cabbage Looper	ations per crop.	L 29LV per acre per crop.	
	Thrips	1 1/2 - 3	1	72 hrs
Lemon CA, AZ & HI only	Western Tussock Moth Orange Tortrix Beet Armyworm			

Lentils	Western Yellowstriped Armyworm	1 1/2 - 3	21	48 hrs
	Do not apply more than 3 pints Do not make more than 2 appl		DMYL 29LV per acre per crop.	
Lettuce	Alfalfa Looper	3/4 - 3	3/4-1 1/2 pt 7	48 hrs
(Head and Leaf varieties)	Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper	1 1/2 - 3	over 1 1/2 pts. – 10	
	Variegated Cutworm 1 1/2			
	days. Lettuce (leaf varieties)	ts of ROTAM METH		
Melons Including: Canteloupe Casaba Santa Claus melon Crenshaw melon Honeydew melon Honey balls Persian melon Golden Pershaw melon	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pts. — 1 day over 1 1/2 pts. — 3 days	48 hrs
Mango melon Pineapple melon Snake melon	Variegated Cutworm	1 1/2		
Watermelon	Do not apply more than 18 pin Do not make more than 12 app		OMYL 29LV per acre per crop.	
Mint (Peppermint,	Variegated Cutworm Alfalfa Looper	3	14	48 hrs
Spearmint)	Flea Beetles	2 1/4 - 3		
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Nectarine CA & AZ only	Thrips	1 1/2 – 3	1	72 hrs
	Do not apply more than 9 pints Do not make more than 3 appl		DMYL 29LV per acre per crop.	

Oats	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 4 applications per crop. Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  Use of a wetting agent may improve performance. Make sequential applications at 5 to 7 day intervals or until armyworm and aphid populations are brought below threshhold.  *Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.  **Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought).  Applications on Russian wheat aphid need to begin when aphid population is low			
Onions	(<10 adults per stem).  Beet Armyworm	1 1/2 - 3**	7 - Green &	48 hrs
(Green & Dry Bulb)	Thrips* Variegated Cutworm Black Cutworm	3**	Dry Bulb Onions	
	Onions, green  Do not apply more than 18 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop; minimum interval between treatments is 5 days.  Onions, dry bulb  Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop; minimum treatment interval between treatments is 5 days.  *Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation to control thrips. Begin applications before thrips populations reach 3-5 thrips per plant. For best results, use the highest rate of ROTAM METHOMYL 29LV and a wetting agent. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  ** Add a wetting agent to improve coverage.			

Oranges CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Fruittree Leafroller Beet Armyworm Citrus Cutworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of Do not make more than 4 applic		. 29LV per acre per crop.	
Peaches	Catfacing Insects (Plant Bugs and Stink Bugs) - begin at petal fall and continue in cover sprays at 7 to 10-day intervals Oriental Fruit Moth* -begin at petal fall; use trapping devices and frequent field inspection to determine need for treatment. Continue treatment in cover sprays and alternate with residual- type insecticides registered for this use. Green Peach Aphid	3 pt (or 3/4 pt per 100 gal up to 400 gal per acre)	4	4 days
Peanuts	Do not apply more than 18 pints Do not make more than 6 applic * Oriental Fruit Moth (Ground Application of the Corn Earworm*	ations per crop.	L 29LV per acre per crop.	48 hrs
	Potato Leafhopper Fall Armyworm			
	Beet Armyworm Green Cloverworm Velvetbean Caterpillar Cabbage Looper Soybean Looper ** Thrips Granulate Cutworm	1 1/4 - 3 1 1/2 - 3		
	Do not apply more than 12 pints Do not make more than 8 applic Do not feed treated vines.  * ROTAM METHOMYL 29LV ha  **Soybean Looper is difficult to o Use higher rate for severe infest	ations per crop. s ovicidal and larvicidal control. Do not apply to	control on corn earworm.	
Pears	Green Fruitworm Oblique banded Leafroller	1 1/2 - 3*	7	48 hrs
Northeast only	Do not apply more than 6 pints of Do not make more than 2 applic * Apply in a minimum of 50 gallo	ations per crop.	. 29LV per acre per crop.	
Peas (succulent) Including: Pigeon peas Chick peas Garbanzo beans	Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar	1 1/2 - 3	1 - Peas 5 – Forage 14 - Hay	48 hrs

Dwarf peas Garden peas Green peas English Peas Field peas	Variegated Cutworm  Alfalfa Caterpillar  Armyworm  Green Cloverworm	3/4 - 3		
Edible pod peas	Do not apply more than 9 pin Do not make more than 6 ap treatments is 3 days.  * Do not use for Cabbage Lo Chemigation: ROTAM METI chemigation. For best results 29LV. Apply in 0.1 to 0.2 inclimore information.  Use of a wetting agent may in Make sequential applications brought below threshhold.	plications per crop; minir opers in AL & GA. HOMYL 29LV may be ap s, use the highest listed r hes of water per acre. Se mprove performance.	num interval between oplied by overhead sprinkler ate of ROTAM METHOMYL ee CHEMIGATION section for	
Pecans Southeast only	Aphids	1 1/2 - 3	30	48 hrs
	Do not apply more than 21 p Do not make more than 7 ap		MYL 29LV per acre per crop.	
Peppers Including: Bell Hot Pimentos	Loopers Beet Armyworm Green Peach Aphid Armyworm Fall Armyworm	1 1/2 – 3	3	48 hrs
Sweet	Variegated Cutworm	3/4 – 1 1/2		
	European Corn Borer	3		
	Do not apply more than 15 p Do not make more than 10 a		MYL 29LV per acre per crop.	
Pomegranates	Omnivorous Leafroller	3	14	48 hrs
	Do not apply more than 6 pin Do not make more than 2 ap		YL 29LV per acre per crop.	
Potato	Tuberworm* Loopers Aphids Beet Armyworm Leafhoppers Fall Armyworm	1 1/2 - 3	6	48 hrs
	Variegated Cutworm Flea Beetles	1 1/2	MYL2 9LV per acre per crop.	

	Chemigation - ROTAM METHON chemigation. For best results, us 29LV. Apply in 0.1 to 0.2 inches a more information.  Use of a wetting agent may impret to 7 day intervals or until insect p *Repeat applications of ROTAM as needed, to control tuber worm insecticides with different modes larval populations as low as possionable damage to the tubers. Failure to senescence or vine kill increases	the highest listed rate of water per acre. See ove performance. Make opulations are brough METHOMYL 29LV on populations. An applie of action may be need to be prior to harvest to adequately control tub	e of ROTAM METHOMYL CHEMIGATION section for  ke sequential applications at 5 t below threshhold. a 5-7 day schedule, or longer cation schedule of effective ded to keep foliar feeding reduce the risk of larval erworm larvae prior to crop	
Rye	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
	Do not make more than 4 application - ROTAM METHOM chemigation - ROTAM METHOM chemigation. For best results, using 29LV. Apply in 0.1 to 0.2 inches of more information.  Use of a wetting agent may improve to 7 day intervals or until armyworthreshhold.  *Cereal leaf beetle: ROTAM MET cereal leaf beetle eggs when applied to correspond with the alegg hatch to achieve maximum of currently registered in California.  **Aphids: For aphid control, crop adverse environmental conditions Applications on Russian wheat a (<10 adults per stem).	MYL 29LV may be apple the highest listed rate of water per acre. See ove performance. Maker mand aphid population of the properties of newly lappearance of	e of ROTAM METHOMYL CHEMIGATION section for  ke sequential applications at 5 ons are brought below  ovide contact ovicidal effect on I directions. Application should aid eggs or in anticipation of this pest stage (egg) is not  ring and not under stress from mperatures or drought).	
Sorghum	Sorghum Webworm	1 1/2*	14**	48 hrs
Including: Sudangrass (except Sweet Sorghum)	Sorghum MidgeApply when 50% bloom and 3 days later if needed. Fall Armyworm (Budworm) Beet Armyworm Corn Earworm Armyworm			
	Do not apply more than 3 pints of Do not make more than 2 applicate Minimum of 10 gallons per acreems. The Do not apply within 14 days of	ations per crop. by ground or 2 gallon	s per acre by air.	
Soybeans	Green Cloverworm Velvetbean Caterpillar Mexican Bean Beetle Corn Earworm - Light to moderate Infestations	2/5 - 3/4 (see Insect Predator section)	14 - Soybeans 3 - Forage 12 - Hay	48 hrs
	Corn Earworm - Moderate to severe	3/4 – 1 1/2		

	Soybean Aphid	1/2 - 1		
	Beet Armyworm Salt Marsh Caterpillar Bean Leaf Beetle Fall Armyworm Thrips Silver Spotted Skipper - Light to moderate infestations	3/4 – 1		
	Silver Spotted Skipper -  Moderate to severe infestations	1 – 1 1/2		
	Do not apply more than 4.5 pints of Do not make more than 3 application		HOMYL 29LV per acre per crop.	
Spinach	Alfalfa Looper Cabbage Looper Beet Armyworm Fall Armyworm	1 1/2 - 3	7	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply when minimum daily temp. is 32° F, or lower.  Do not apply to seedlings less than 3" diameter.  Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.			
Sugar Beet	Beet Webworm Flea Beetles Carrion Beetles Beet Armyworm* Aphids* Western Yellowstripe Armyworm*	3/4 - 3	30 - Tops 21- Roots	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 10 applications per crop.  *Chemigation - ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation to control beet armyworm, aphids and western yellowstriped armyworm. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.			
Summer Squash* Including: Crookneck squash Straightneck squash Scallop squash Vegetable marrow Spaghetti squash Hyotan Cucuzza Hechima Chinese okra	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pt 1 day over 1 1/2 pt 3 days	48 hrs
			OMYL 29LV per acre per crop.	

Cucumber	of the fruit is edible cooked or	liferede men benje	not be stored, has a soft rind	
Tangelo, Tangerine CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Tobacco (Except shade)	Flea Beetle Hornworm	3/4 – 1 1/2	5 - Flue cured 14 - Air or fire cured	48 hrs
	Loopers Aphids Tobacco Budworm Fall Armyworm	1 1/2		
	Do not apply more than 7.5 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 5 applications per crop.			
Tomato (Including Tomatillos*)	Tomato Fruitworm Aphids Hornworm Loopers Beet Armyworm Southern Armyworm Pinworm Armyworm Fall Armyworm	1 1/2 - 3	1	48 hrs
	Variegated Cutworm	1 1/2		
Turf (For use on sod	Do not apply more than 21 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 16 applications per crop.  * For tomatillos do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 5 applications per crop.  Sod Webworm  3			10.1-
farms only)	(after application, sprinkle irrigate for 15 minutes)	(1.1 fl. ozs. per 1000 sq. ft.)		48 hr
	Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.  Do not graze or feed.			
Wheat	Armyworms Cereal Leaf Beetle*	3/4 – 1 1/2	7	48 hrs

Do not make more than 4 applications per crop.

Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.

Use of a wetting agent may improve performance. Make sequential applications at 5 to 7 day intervals or until armyworm and aphid populations are brought below threshold.

\*Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.

\*\*Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought). Applications on Russian wheat aphid need to begin when aphid population is low (<10 adults per stem).

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only. Not for use or storage in or around the home.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Pressure rinse as follows: Empty the remaining product contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Insert pressure rinsing nozzle in the container, and rinse at about 40 PSI for at least 30 seconds. Drain rinsate for 10 seconds after the flow begins to drip. Pour or pump rinsate into application equipment or rinsate collection system. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

All Refillable Containers: Refillable container. Refilling Container: Refill this container with ROTAM METHOMYL 29LV containing methomyl only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see proceeding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not transport if container is damaged or leaking.

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Rotam Agrochemical Company Limited or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Rotam Agrochemical Company Limited and Seller harmless for any claims relating to such factors.

Rotam Agrochemical Company Limited warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Rotam Agrochemical Company Limited, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW ROTAM LTD MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, Rotam Agrochemical Company Limited or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. To the extent consistent with applicable law the exclusive remedy of the user or buyer, and the exclusive liability of rotam agrochemical company limited and seller for any and all claims, losses, injuries or damages (including claims based on breach of warranty, contract, negligence, tort, strict liability or otherwise) resulting from the use or handling of this product, shall be the return of the purchase price of the product or, at the election of rotam agrochemical company limited or seller, the replacement of the product.

Rotam Agrochemical Company Limited and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Rotam Agrochemical Company Limited.

Manufactured by: 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Registered: [TBA]

[Back Page of Booklet - remains on the container when booklet is removed]

#### RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP 1A INSECTICIDE

## Rotam Methomyl 29LV Insecticide

Water Soluble Liquid
Contains 2.4 lbs. active ingredient per gallon

Active Ingredient By Weight

Methomyl
(S-methyl-N-[(methylcarbamoyl)
oxy]thioacetimidate) 29%

 Other Ingredients
 71%

 TOTAL
 100%

Contains Methanol

EPA Reg. No. 83100 - 27

EPA Est. No.: 5905-GA-01

# KEEP OUT OF REACH OF CHILDREN DANGER POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Refer to inside label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations, Engineering Controls Statements, Environmental Hazards and Directions For Use.

#### **FIRST AID**

(N-Methyl Carbamate insecticide)

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

**POISONING SYMPTOMS** — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section and seek medical attention at once.

#### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

**TREATMENT** — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact the National Poison Control Center 24-hr Emergency Hotline at: 1-800-222-1222.

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS KEEP OUT OF REACH OF CHILDREN DANGER POISON



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Restricted Use Pesticide due to toxicity categories. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Contains Methanol. Methanol may cause blindness. Causes irreversible eye damage. May be fatal if swallowed or if inhaled. Harmful if absorbed through skin. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Do not breathe spray mist. Avoid contact with skin.

Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Natural Rubber, Selection Category C). For handling activities, applicators must wear a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any R, P, or HE prefilter.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

#### PHYSICAL AND CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation. The product shows potential explosive properties when heated to elevated temperatures.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only. Not for use or storage in or around the home.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Pressure rinse as follows: Empty the remaining product contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Insert pressure rinsing nozzle in the container, and rinse at about 40 PSI for at least 30 seconds. Drain rinsate for 10 seconds after the flow begins to drip. Pour or pump rinsate into application equipment or rinsate collection system. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

All Refillable Containers: Refillable container. Refilling Container: Refill this container with ROTAM METHOMYL 29LV containing methomyl only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see proceeding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not transport if container is damaged or leaking.

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Registered: (TBA)

Net Contents
Gallons
TBA



#### Rotam Methomyl Labels 83100-27 & 83100-28

Frank Sobotka o Thomas Harris

04/04/2011 01:09 PM

I revised the two end use labels per your instructions over the weekend and am sending for your review. See Attached.

Dr. Frank E. Sobotka, Senior Partner IPM Resources LLC 4032 Crockers Lake Blvd. Suite 818 Sarasota, FL 34238

PH: 215 497-9501 FX: 215 497-9502

POF

PDI

083100-0027.20110404.Primary Lbl.pdf 083100-0028.20110404.Primary Lbl.pdf



#### detailed review of 83100-ET

0.00.00 2.

Thomas Harris o Frank Sobotka

04/01/2011 12:13 PM

Dr. Sobotka,

Attached is a detailed review of 83100-ET. Two versions: print image (just print on color printer; easiest way to see comments); "live" (can use to copy/paste large blocks of text in comments)

Also attached is Dupont 352-384; you'll need this to copy/paste then edit Storage Disposal. If you could get me a revised label by Monday that would be great. Looking to complete this on Tue 4/5 PRIA due date.

PDF A

print image (just print) 083100-000ET.20110308.29LV Primary.EPA COMMENTS.print image.pdf

POP

"live" 083100-000ET.20110308.29LV Primary.EPA COMMENTS.pdf

Dupont (just missing front two pages to make compare line up better:

POI

edited.000352-00384.20101208.LANNATE LV D-1653 111810.pdf

I'll do -El next but same general comments may apply although exact tox text and chemistry text may be different.

Tom Harris EPA/OCSPP/OPP/RD/IRB voice: (703) 308-9423 fax: (703) 308-0029 harris.thomas@epa.gov

visit http://www.epa.gov/pesticides

[Front Container Label -- Optional if Booklet is used as front container label]

#### RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP 1A INSECTICIDE

#### Rotam Methomyl 29LV Insecticide

per gallon	
ByWeight	
29%	
71%	insert "contains methanol"
100%	And Something Internation
	29% 71%

EPA Reg. No. 83100-TBA

EPA Est. No.: TBA

## KEEP OUT OF REACH OF CHILDREN WARNING

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional Precautionary Statements on inside booklet and back panel of container and Directions for Use on inside booklet.

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Net Contents Gallons

083100-000ET.20110308.29LV Primary EPA COMMENTS pdf

#### Summary of Comments on [Directions for use booklet]

Author: tharri02 Subject Callout Date: 4/1/201	1 10:31:44 AM	
insert "contains methanol"		
Author: thami02 Subject: Replacement Text	Date: 4/1/2011 10:16:34 AM	
REPLACE with:		
"other ingredients"		
E Author, tharri02 Subject: Replacement Text	Date: 4/1/2011 10:17:27 AM	
REPLACE with:		
"DANGER skut/crossbones POISON		
PELIGRO"		
in red		
- Author, tharri02 Date: 4/4/2011 5:44:29 PM		

[Booklet Cover]

PULL HERE TO OPENI

#### RESTRICTED USE PESTICIDE

Due to high Acute Toxicity to Humans

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment,

GROUP

1A INSECTICIDE

Rotam Methomyl 29SL Insecticide

#### KEEP OUT OF REACH OF CHILDREN WARNING

move ingredient section from next page to here

srusted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain if to you in detail.)

#### FIRST AID

(N-Methyl Carbamate insecticide)

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Drink 1 or 2 glasses of water and induce vorating by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center of doctor for treatment advice.

IF INHALED: Move person to fresh air, If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. IF ON SKIN OR CLOTHING: Take of contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

ATROPINE IS AN ANTIDOJÉ -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

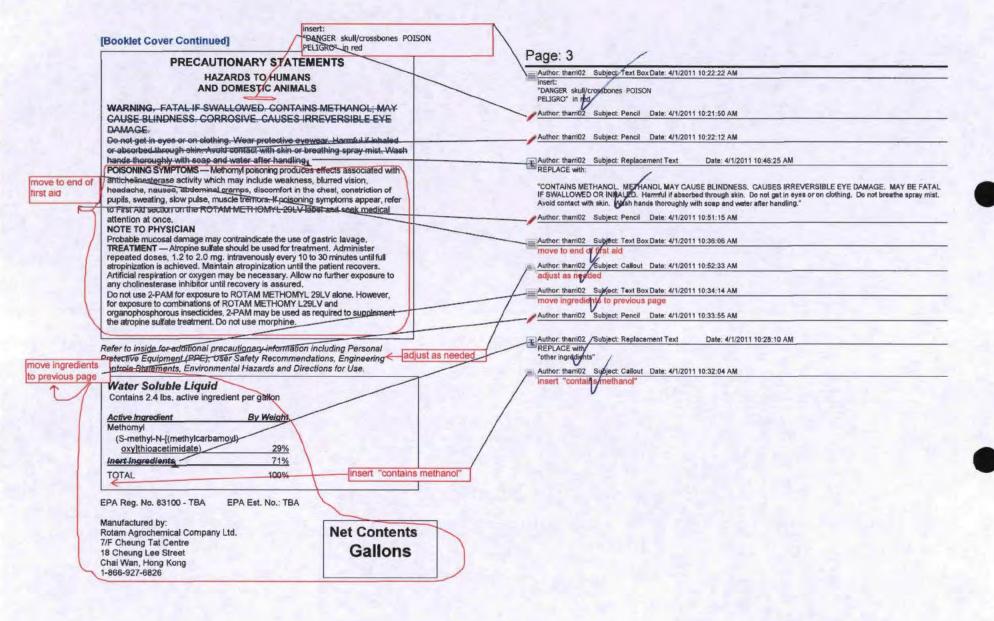
If poisoning symptoms appear (see POISONING SYMPTOMS), get medical

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

move poisoning symptoms and note to physician to here at end of first aid

Page: 2

Author: tharri02 Subject: Replacement Text Date: 4/1/2011 10:20:03 AM REPLACE with: "DANGER skull/cressiones POISON PELIGRO" Author: thami02 Subject: Callout Date: 4/1/2011 10:33:31 AM move ingredient section from next page to here Author: tharri02 Subject: Callout Date: 4/1/2011 10:35:24 AM move poisoning symptoms and note to physician to here at end of first aid



#### [Inside Booklet page 2]

#### **Table of Contents**

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Precautionary Statements
Directions for Use
 Agricultural Use Requirements
General Information
 Scouting
 Insect Predators
 Resistance
 Compatibility
Integrated Pest Management
Spray Preparation
Application
Spray Drift Management
Crop/Rate Tables
Storage and Disposal
Notice of Warranty

[move table of contents to after Precautionary Statements but before Directions for Use; delete references to first aid and prec. stmts] could list individual crops, if desired

#### Page: 4

Author: tharni02 Subject: Text Box Date: 4/1/2011 11:34:19 AM

[move table of contents to after Precautionary Statements but before Directions for Use; delete references to first aid and prec. stmts]

could list individual crops, if desired

## PRECAUTIONARY STATEMENTS (Continued) HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

PERSONAL PROTECTIVE EQUIPMENT  Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category B on an EPA chemical-resistance category  Applicators and others exposed to the diluted spray solution must wear:  Long eleeved shirt and long pants.  Chemical resistant gloves such as barrier laminate or bulyl rubber.  Shoes plus socks.
Protective eyewear.  Mixers, loaders, cheaners, repairers of application equipment, and others exposed to the concentrate must wear:  Long sleeve shirt and long pants.  Chemical-resistant gloves, such as barrier laminate or butyl subber.  Socks and chemical resistant footwear.  Protective eyewear.  Respirator as outlined below.
Chemical resistant apron.  For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC 23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any R, P, or HE prefilter.  For exposures outlears, Dust/mist filtering respirator (MSHA/NIOSH approved number prefix TC 21C), or a NIOSH approved respirator with any R, P, or HE prefilter. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for deaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other

#### **ENGINEERING CONTROL STATEMENTS**

Human flaggers must be in enclosed cabs.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Pliots must not assist in the mixing and loading operations.

Page: 5 Author: tharri02 Subject: Cross-Out Date: 4/1/2011 10:25:56 AM don't need signal word here since this is just precautionary section continued Author, tharri02 Subject: Cross-Out DELETE Date: 4/1/2011 11:35:31 AM no data submitted to support reminder: Rotam no same tox as Dupont T Author: thami02 Subject: Inserted Text Date: 4/1/2011 10:58:44 AM insed "applica bra Author: tharri02 Subject: Replacement Text
REPLACE with: Date: 4/1/2011 10:54:44 AM "natural rubber or other materials in EPA category C." Author: tharri02 Subject: Cross-Out Date: 4/1/2011 10:55:26 AM Author: tharri02 Subject: Cross-Out Date: 4/1/2011 10:55:58 AM start Respirator with cap letter Author tharri02 Subject Cross-Out delete Date: 4/1/2011 10:57:14 AM Author: tharrie2 Subject: Inserted Text Date: 4/1/2011 10:56:46 AM

#### USER SAFETY RECOMMENDATIONS USERS SHOULD:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- · Remove personal protective equipment immediately after handling this product.
- · Wash the outside of gloves before removing.
- As soon as possible, wash thoroughly and change into clean clothing, add: "Remove and wash contaminated clothing before reuse."

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to bees exposed to direct treatment of blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for rupoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, requently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

#### PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation. "The product shows potential explosive properties when heated to elevated temperatures."

insert Table of contents here at start of DFU, if used

#### DIRECTIONS FOR USE Restricted Use Pesticide

ਜਾਂ s'a violation of federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements of this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry fillo freated areas during the restricted entry interval (REI). REI Summary: REI grapes = 7 day; REI peaches = 4 day; REI apple, cotton, grapefruit, lemon, nectarine, orange, tangelo, tangerine = 3 day; all other WPS uses = 48 hour REI.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Chemical-resistant gloves, such as barrier laminate or butyl nubber. Shoes plus socks.

Protective everwear.

Discard atothing or other absorbent materials that have been direnched or beautify contaminated with this product's concentrate. Do not reuse them Notify workers of the application to grapes by warping them orally and by posting Warning signs at entrances to freated areas.

#### GENERAL INFORMATION

Chemigation: Overhead sprinkler etamigation is allowed for use in alfalfa, barley, succulent and dry beans, oats, onlons, succulent peas, potatoes, rye, sugar beets, sweet corn and wheat. Drip chemigation is allowed for onlons. See Federal Supplemental labeling for overhead sprinkler chemigation directions for use in sweet corn, succulent peas and succulent and dry beans; and for directions for use for drip chemigation in onlons. Refer to supplemental, or Special Local Need (SLN) labeling or the crop specific sections of this label for use directions for chemigation. Do not apply this product through any other type of irrigation systems, except those allowed by instructions provided in a supplemental, SLN or this product label.

Do not formulate this product into other End-use products without written permission from Rotam.

ROTAM METHOMYL 29LV insecticide should be used only in accordance with directions for use on this label or in separate Rotam supplemental labeling. Rotam will not be responsible for use of the product in a manner not specified by Rotam in the product's labeling and User assumes all risk for such use.

ROTAM METHOMYL 29LV is a water soluble liquid that is applied by foliar application to control many important insect pests. ROTAM METHOMYL 29LV is mixed with water for application.

Pilots must not assist in the mixing and loading operations. Do not apply by ground equipment within 25 feet, or by air within 100 feet of

# move to chemigation section

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lakes, reservoirs, rivers, estuaries, commercial fish ponds and natural, permanent streams, marshes or natural, permanent ponds. Increase the buffer zone to 450 feet from the above aquatic areas when ultra low volume application is made.

Hand-held equipment is prohibited for applications to crops. This product must be applied to crops only with mechanical ground, overhead sprinkler chemigation or aerial application equipment.

Use only in commercial and farm plantings. Not for use in home plantings. Not for use during any period after a commercial crop site is opened for public entry as a "U-Pick", "Pick Your Own" or similar operation; in no case shall prefiarvest applications be made after first public entry. The restricted entry interval and preharvest interval for the crop stated elsewhere on this label must be followed.

#### SCOUTING

Monitor insect populations to determine whether or not there is a need for application of ROTAM METHOMYL 29LV based on locally determined economic thresholds. More than one treatment of ROTAM METHOMYL 29LV may be luired to control a population of pests.

be better following IPM section

#### NEFICIAL ARTHROPODS

ROTAM METHOMYL 29LV at rates of 2/5 to 3/4 pint per acre helps conserve certain beneficials, including big-eyed bugs, damsel bugs, flower bugs and spiders in cotton and soybeans. While these beneficials cannot be relied upon to control pests, they are of potential value and should be monitored along with pests in pest management programs on these crops.

#### RESISTANCE MANAGEMENT

For resistance management, ROTAM METHOMYL 29LV insecticide is a group 1A insecticide. Repeated and exclusive use of ROTAM METHOMYL 29LV or other group 1A insecticides may lead to the build-up of resistant strains of insects in some crops. Not all members of this group have been shown to be cross-resistant. Different resistance mechanisms that are not linked to target site of action, such as enhanced metabolism, are common for this group of chemicals. Alternation of compounds from different sub-groups within this group may be an acceptable part of an integrated pest management program.

Some insects are known to develop resistance to products used repeatedly for control. When this occurs, the recommended dosages fail to suppress the pest population below the economic threshold. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode-of-action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of

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control for your area. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org.

#### INTEGRATED PEST MANAGEMENT

This product should be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

#### SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying ROTAM METHOMYL 29LV.

Fill spray tank 1/4 to 1/2 full of water. Add ROTAM METHOMYL 29LV directly to spray tank. Mix thoroughly. Use mechanical or hydraulic means; do not use air agitation. Spray mix should not be stored overnight in spray tank.

Compatibility — Since formulations may be changed and new ones introduced, in this situation users can premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.) before applying the product. Avoid mixtures of several materials and very concentrated spray mixtures.

Do not use ROTAM METHOMYL 29LV with Bordeaux mixture (copper sulfate and hydrated lime), Du Ter triphenyttin hydroxide, time sulfur, Rayplex iron nor in highly alkaline solutions. Use mildly alkaline mixtures immediately after mixing to prevent loss of insecticidal activity.

Tank Mix Sequence – Add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after addition of each product.

- 1. Water soluble bags.
- 2. Water dispersible granules
- Wettable powders
- 4. Water based suspension concentrates
- 5. ROTAM METHOMYL 29LV and other water soluble concentrates
- 6. Oil based suspension concentrates
- 7. Emulsifiable concentrates
- Adjuvants, surfactants, oils, soluble fertilizers, and drift retardants. Follow local practice and manufacturer's recommendation.

#### APPLICATION

Apply at the recommended rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Follow-up treatments of ROTAM METHOMYL 29LV should be applied, as needed, to keep pest populations within threshold limits. On most crops, ROTAM

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METHOMYL 29LV should be applied at 5 to 7 day intervals to maintain control. Refer to crop specific directions for use in the crop tables for more specific information on treatment intervals.

Use sufficient water to obtain thorough, uniform coverage, Since ROTAM METHOMYL 29LV is a fast acting contact insecticide, best results follow direct spraying of the target insect.

For aerial, use a minimum of 2 gals, per acre (gpa) except 10 gpa for grapes, peaches, and nectarines; 15 gpa for oranges, lemons, grapefruit, tangelos and tangerines.

ROTAM METHOMYL 29LV is recommended for use as a low volume aerial spray 0.53 gpa (2L) for cotton\* and soybeans\* and 1 gpa for the crops listed below providing the following conditions are met:

- -equipment is adjusted to distribute spray uniformly over the spray swath,
- -wind conditions and other factors such as temperature and humidity are such
- -that the spray is delivered to the target area,
- -local regulations do not prohibit low-volume aerial sprays,
- -use rates are applied as directed on the package label or supplemental labeling for the following crops:

Alfalfa Celery Peas (succulent) Anise Collards Peppermint Asparagus Com Peppers Barley Cotton Potato Beans Cucumber Broccoli Lettuce Soybean Brussels sprouts Melons Spinach Cabbage Mint Sugar beet Carrot Oats Summer Squash Cauliflower Peanuts Wheat

Apply the low rates on small plants, small insects and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use 1 to 3 applications of the highest recommended rate for controlling severe infestations. Hereafter, use the lowest rate possible to maintain control.

\* Not Registered for aerial application in a diluted volume of less than 1 gal in CA.

#### SPRAY TANK CLEANOUT

Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations. Author: tharri02 Subject: Cross-Out delete

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#### CHEMIGATION

Instructions for the Use of ROTAM METHOMYL 29LV on Alfalfa, Barley, Oats, Green and Dry Bulb Onions, Potatoes, Rye, Sugar Beets and Wheat Using Overhead Sprinkler Chemigation

Overhead chemigation applications offer the advantage of greater penetration and coverage of the target plant. However, typical chemigation applications are more dilute than ground or aerial applications. For best results, it is recommended to keep the concentration of ROTAM METHOMYL 29LV as high as possible in the application. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre.

ROTAM METHOMYL 29LV is most active as a contact insecticide, although it does also have activity via ingestion of treated plants. For best results, applications of ROTAM METHOMYL 29LV should take place when the insects are active and most likely to come into direct contact with the application.

#### Types of Irrigation Systems:

ROTAM METHOMYL 29LV may be applied through overhead sprinkler irrigation systems for control of various pests. The irrigation system used must provide uniform water distribution. Do not use filter screens smaller than 50 mesh throughout the system, due to possible build up of material on 100 mesh or smaller screens. Do not apply ROTAM METHOMYL 29LV through any other type of irrigation systems, except those allowed by instructions provided in a supplemental, SLN, or this product label.

### General Directions for Chemigation:

#### Preparation

A pesticide tank is recommended for the application of ROTAM METHOMYL 29LV in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Add 1/4 to 1/2 of the desired amount of water and then measure the required amount of ROTAM METHOMYL 29LV into the tank. Complete filling the tank by adding the required amount of water. Agitate thoroughly to insure a uniform solution of ROTAM METHOMYL 29LV. Once in solution, no further agitation is required. Injection solution should not be stored overnight. Highly alkaline water should be buffered so that the pH of the spray solution is in the range of neutral to slightly acidic (pH5-7).

### Injection into Chemigation Systems

Inject the proper amount of the ROTAM METHOMYL 29LV.solution into the irrigation water flow using a positive displacement injection pump. Injection should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water.

#### **Uniform Water Distribution**

The irrigation system used for application of ROTAM METHOMYL 29LV must provide for uniform distribution of ROTAM METHOMYL 29LV treated water. Non-uniform distribution might result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.

### **Equipment calibration**

Calibrate the irrigation system and injector before applying ROTAM METHOMYL 29LV. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, you should contact your state extension service specialists, equipment manufacturer or other experts.

### Monitoring of Chemigation Applications

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for cleaners and repairers of application equipment when making adjustments or repairs on the chemigation system when ROTAM METHOMYL 29LV is in the irrigation water.

#### Required System Safety Devices

Do not connect any irrigation system used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock
- 7. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticion introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction.

There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

### Posting of Areas to be Treated

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any other public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to all the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The signs shall be printed in ENGLISH. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color, which sharply contrasts with their immediate background. At the top of the sign shall be the words "KEEP OUT", followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word "STOP". Below the symbol shall be the words "PESTICIDE IN IRRIGATED WATER".

Posting for chemigation does not replace other posting and reentry requirements for farm worker safety.

#### Operation

Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injection system according to the directions above. This procedure is necessary to deliver the desired rate per acre in a uniform manner. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system. End guns must be turned off during the application, if they irrigate nontarget areas or if they do not provide uniform application and coverage.

Nozzles in the immediate area of control panels, chemical supply tanks, wellheads and system safety devices must be plugged to prevent contamination of these areas.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Do not apply when system connections or fittings leak or when nozzles do not provide uniform distribution.

### Cleaning the System

Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner's manual or your local equipment dealer for cleanout procedures for your injection system.

#### SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment—and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

### AERIAL DRIFT REDUCTION ADVISORY INFORMATION Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

### Controlling Droplet Size - General Techniques

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle.
   Higher pressure reduces droplet size and does not improve canopy penetration.
   WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

### Controlling Droplet Size - Aircraft

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orlentation Orienting nozzles so that the spray is released parallel
  to the airstream produces larger droplets than other orientations and is the
  recommended practice. Significant deflection from horizontal will reduce
  droplet size and increase drift potential.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types and the lowest drift.
- Boom Length For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift

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without reducing swath width.

- Application Height Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
- Swath Adjustment When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downward edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

#### BOOM HEIGHT

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. AVOID GUSTY OR WINDLESS CONDITIONS.

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

### **TEMPERATURE AND HUMIDITY**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

### **TEMPERATURE INVERSIONS**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind.

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However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

### AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

### AIR ASSISTED (AIR BLAST) TREE AND VINE SPRAYERS

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides. In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	RE
Alfalfa	Pea Aphid Lygus Bugs Blotch Leafminer Aphids Egyptian Alfalfa Weevil Larvae Loopers Beet Armyworm Armyworm Affalfa Caterpillar Fall Armyworm Western Yellowstriped Armyworm Yellowstriped Armyworm	1 1/2 - 3	7*	48 hr
	Alfalfa Weevil Larvae	3		
	Variegated Cutworm	3/4 - 3		

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Do not make more than 10 application Chemigation: ROTAM METHOMYL 20 chemigation. For best results, use the 29LV. Apply in 0.1 to 0.2 inches of warmers information—jalfalfa insert:	ns per crop. 29LV may be applied to be highest listed rate of ater per acre. See CH Do not apply within	oy overhead sprinkler ROTAM METHOMYL EMIGATION section for	
Cabbage Looper allowing livestoc	ak to graze.		hrs
Beet Armyworm	1 1/2 - 3		
		9LV per acre per crop.	
Apple Aphid Rosy Apple Aphid Tufted Apple Budmoth Green Fruitworm Tamished Plant Bug	1 1/2 - 3 *	14	72 hrs
Codling Moth (10-12 day spray intervals)			
Leafrollers (Fruit-tree, Obliquebanded, Redbanded, Variegated) Lesser Appleworm White Apple Leafhopper Tentiform Leafminer Cutworm	3*		
Do not apply more than 15 pints of R Do not make more than 5 application treatments is 7 days.	OTÁM METHOMYL 2 s per crop; minimum i	9LV per acre per crop. nterval between	
Beet Armyworm.	110.3		48 hrs
Western Yellowstriped Armyworm Asparagus Beetle Spotted Asparagus Beetle White Cutworm Redbacked Cutworm	1112-3		
Variegated Cutworm	1 1/2		
Do not apply more than 15 pints of R		9LV per acre per crop.	
Western Avocado Leafroller Omnivorous Looper Do not apply more than 3 pints of RC Do not make more than 2 application		1 LV per acre per crop.	48 hrs
Armyworms	a par didp.		48 hrs
	Do not make more than 10 application Chemigation. For best results, use the 29LV. Apply in 0.1 to 0.2 inches of we more information. In the 0.2 inches of we more information. It is of Romania and the 0.2 inches of we more information. In the 0.2 inches of we we we we we will be one of the 0.2 inches of we will be 0.2	Do not make more than 10 applications per crop. Chemigation: ROTAM METHOMYL 29LV may be applied to chemigation. For best results, use the highest listed rate of 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CH more information.  Cabbage Looper allowing livestock to graze."  Beet Armyworm  Do not apply more than 15 pints of ROTAM METHOMYL 2 Do not make more than 10 applications per crop.  Apple Aphid  Rosy Apple Aphid  Rosy Apple Aphid  Tufted Apple Budmoth Green Fruitworm Tamished Plant Bug  Codling Moth (10-12 day spray intervals)  Leafrollers (Fruit-tree, Obliquebanded, Redbanded, Variegated)  Lesser Appleworm  White Apple Leafhopper Tentiform Leafminer Cutworm  Do not use on Early Macintosh & Wealthy varieties Do not apply more than 15 pints of ROTAM METHOMYL 2 Do not make more than 5 applications per crop; minimum is treatments is 7 days.  * Apply in a minimum of 50 gallons of water per acre.  Beet Armyworm, Western Yellowstriped Armyworm Asparagus Beetle Spotted Asparagus Beetle White Cutworm  Redbacked Cutworm  Variegated Cutworm  Var	Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information

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Author: thami02 Subject: Callout Date: 4/1/2011 1/:37:15 AM
alfalfa insert: - "Do not apply within 7 days of cutting or allowing livestock to graze."

	more information.  "Cereal leaf beetle: ROTAM cereal leaf beetle eggs wher be timed to correspond with egg hatch to achieve maxim currently registered in Califor "Aphids: For aphid control, adverse environmental cond	HOMYL s, use the hes of w METHO applied the appe um ovicion ia. crop mu- itions (si	29LV may be apended in the per acre. See MYL 29LV can according to laborate of newly dall effect. Use out to be actively ground as, extreme	ate of ROTAM METHOMYL be CHEMIGATION section for brovide contact ovicidal effect on bel directions. Application should laid eggs or in anticipation of n this pest stage (egg) is not bowing and not under stress from	
Beans (Succulent) Including: Kidney Lima Mung	Leafhopper Mexican Bean Beetle		3/4 – 3	Succulent Beans - 3/4 - 1 1/2 pts 1, over 1 1/2 pts 3; 3 - Vines 7 - Hay	48 hrs
Navy Pinto Snap Wax	Fall Armyworm Variegated Cutworm		1 1/2	7-71-0	
Broad Fava Asparagus Blackeyed peas Cowpeas Chick peas Garbanzo beans Sweet lupine White sweet lupine White lupine Grain lupine	Beet Armyworm Corn Earworm Saltmarsh Caterpillar, Yellowstriped Armyworm Western Yellowstriped Army Lygus Bugs Thrips Aphids Loopers*	worm	1 1/2 - 3		
Grain tupine	European Corn Borer (Ovicide & Larvicide)— Init when moth flights first app and-continue preventive treatments at 3-4 day inte To control eggs and larvae	rvals			
	Spotted Cucumber Beetle		3/4 - 1 1/2		
	Do not apply more than 15 p Do not make more than 10 a * Do not use for Loopers in A	pplication	ns per crop.	MYL 29LV per acre per crop.	E.F.L
Beans (Dry) (Same as Succulent Beans)	(Same as Succulent Beans)	Suo	ne as culent ans)	14 - Dry Beans * 14 - Vines * 14 - Hay *	48 hrs
	Do not apply more than 15 p make more than 10 applicati Do not use for Loopers in AL *Do not apply within 14 days	ons per . & GA.	crop.	MYL 29LV/acre /crop. Do not	
Beets (Table)	Imported Cabbageworm	3/4	1-3	0 - roots	48 hrs
	Beet Armyworm Cabbage Looper Diamondback Moth	11	/2 - 3	10 -tops	

	Cucumber Beetle Variegated Cutworm	1 1/2		
	Do not apply more than 12 p Do not make more than 8 ap		ETHOMYL 29LV per acre per crop. p.	
Bermudagrass pasture	Fall Armyworm Armyworm Striped Grass Looper	3/4 - 3	7 - Forage * 3 - Dehydrated Hay **	48 hrs
	Do not make more than 4 ap	oplications per cro of feeding forage	or allowing livestock to graze.	
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil Sharp-Nosed Leafhopper	1 1/2	3	48 hrs
	Cranberry Fruitworm* Cherry Fruitworm*	1 1/2 - 3		
	Flea Beetle (larvae) Sawfly (larvae) Blueberry Leafroller	3		
	Blueberry Maggot	3/4-1 1/2		
	not apply more than 12 not make more than 4 application of application of the following more than 12 not make more than 12 not more than 12		ETHOMYL 29LV per acre per crop. Do	48 hrs
Broccoli	Moth			401113
	Imported Cabbageworm	3/4 - 3**		
	Do not apply more than 21 p Do not make more than 10 treatments is 2 days. ** Add a wetting agent to im	applications per or	ETHOMYL29LV/acre/crop op; minimum interval between	
Brussels Sprouts	Loopers Imported Cabbageworm, Diamondback Moth	1 1/2 – 3 **	3	48 hrs
	Variegated Cutworm	1 1/2 **		
		applications per cr	ETHOMYL 29LV per acre per crop. op; minimum interval between	
Cabbage	Loopers * Diamondback Moth Fall Armyworm	1 1/2 - 3 **		48 hrs
	Imported Cabbageworm	3/4 - 3 **		
	Variegated Cutworm	1 1/2 **		
	Do not make more than 15 app days.	olications per crop; n	ETHOMYL 29LV per acre per crop.  ninimum interval between treatments is 2  cabbage insert: "Add a wetting a	agent t
Carrot	* Do not use for Loopers in a Beet Armyworm Armyworms Aster Leafhopper	1 1/2 - 3	improve coverage."	-30m t

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Author: tharri02 Subject: Callout Date: 4/1/2011 11:37:38 AM cabbage insert: "Add a wetting lagent to improve coverage."

	Variegated Cutworm	3/4 - 1 1/2		
	Do not apply more than 21 pints	of ROTAM METHON	MYL 29LV per acre per crop.	
	Do not make more than 10 appli			
Cauliflower	Imported Cabbageworm	3/4 - 3 **	3	48 hrs
	Loopers Diamondback Moth	1 1/2 - 3 ** -		-
	Variegated Cutworm	1 1/2 **		
	Do not apply more than 24 pints Do not make more than 10 appli treatments is 2 days. ** Add a wetting agent to improv	cations per crop; min		
Celery	Beet Armyworm Aster Leafhopper	1 1/2 – 3	7	48 hrs
	Loopers	3		
	Variegated Cutworm	1 1/2		1
	Armyworms	3/4 - 3		
7+1-2	Do not apply more than 24 pints Do not make more than 10 appli		MYL 29LV per acre per crop.	
Chicory	Beet Armyworm Variegated Cutworm Leafhoppers	1 1/2 - 3	80	48 hrs
	Do not apply more than 6 pints of Do not make more than 2 applic		YL 29LV per acre per crop.	
	Loopers Beet Armyworm	1 1/2 - 3*	10	48 hrs
				-
Chinese Cabbage	Do not apply more than 24 pints Do not make more than 10 appli * Minimum of 25 gallons water p	cations per crop.		
Collards (Fresh market	Do not make more than 10 appli	cations per crop.		48 hr
Collards	Do not make more than 10 appl * Minimum of 25 gallons water p Diamondback Moth	cations per crop. er acre by ground or	5 gallons by air.	48 hr
Collards (Fresh market	Do not make more than 10 appli Minimum of 25 gallons water p Diamondback Moth Variegated Cutworm Imported Cabbageworm Beet Armyworm	cations per crop. er acre by ground or 1 1/2 1 1/2 - 3  than 50* F Do not ag of ROTAM METHO) ations per crop.	5 gallons by air.  10  oply when crop is less than 10"	48 hrs
Collards (Fresh market	Do not make more than 10 appl * Minimum of 25 gallons water p Diamondback Moth Vaniegated Cutworm Imported Cabbageworm Beet Armyworm Loopers* Do not apply when temp. is less tall. Do not apply more than 18 pints Do not make more than 8 applic	cations per crop. er acre by ground or 1 1/2 1 1/2 - 3  than 50* F Do not ag of ROTAM METHO) ations per crop.	5 gallons by air.  10  oply when crop is less than 10"	48 hr

		Do not make more than 10 applica *Corn forage is green actively gro The plants can be fed directly to a parts of the plant that remain after remaining stalks and leaves can b	wing plants that are nimals or used to n removal of the gra	nake silage. Corn stover are the in at full plant maturity. These	
		Earworm-Whorl as needed	1-11/2	0 -Ears	48 hrs
	6	Fall Armyworm Armyworm Earworm, (Ovicide/Landelde) European-Com Borer -Ears 1-3 days or as	3/4 - 1 1/2	3 - Forage 21 - Slover	
put line acro at bottom of separate fro cotton	com to	needed Corn Rootworm (adult beetles) Flea Beetles Picnic Beetles Aphids			
	(Sweet)	Variegated Cutworm Beet Armyworm	1 1/2		
		Certain hybrid varieties of sweet of Treat a small area to determine or Do not apply more (bar 21 pints of Do not make ande than 28 applica- treatments is 1 day.	op safety before ful f ROTAM METHOR	I scale spraying.  IYL 29LV per acre per crop.	
		Ovicide/Larvicide - Bollworm Tobacco Budworm Initiate schedule when significant numbers of eggs are present Continue at 3 to 5-day intervals while eggs are present and larval control is adequate. If significant larvae survive, use higher rabes below. Lygus Bugs/Plant Bugs (adults and nymphs) Start treatment on low level Population for suppression.	2/5 - 3/4 (see insect Predator Section)	15	72 hrs
		Cotton Leafworm	3/4 - 1 1/2		
		Cotton Fleahopper (as needed)	2/5 - 3/4		
		Aphids, Thrips	3/4		
Eas	of Rockies only	(Early Season) Bollworm Tobacco Budworm Beet Armyworm Colton Leafperforator Fall Armyworm Lygus Bugs/PlantBugs (adults and nymphs) Use as occasional spray in regular schedule but not more often than every 10 days.	1 1/2		
		(Late Season)	1 1/2 - 2 1/4		

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Author: tharn02 Subject: Text Box Date: 4/1/2011 11:13:53 AM put line across row at bottom of corn to separate from cotton

Author: themi02 Subject Pencil Date: 4/1/2011 11:14:00 AM

Author: tharri02 Subject: Princil Date: 4/1/2011 11:13:15 AM

	Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/Plant Bugs (adult and nymphs) Up to 3 applications at 3-5 day intervals after desired boll load set on plants.			
Texas	Cotton Aphid	3/4 - 2		
West of Rockies only	Larvicide for worms: Bollworm Fall Armyworm Tobacco Budworm Lygus Bugs Beet Armyworm	1 1/2 – 2 1/4		
	Cotton Leafperforator For applications West of the Roc	1-21/4		2
	desired boll load set on plants.  For all applications made to co Do not apply more than 6 pints o Do not make more than 8 applica Do not graze or feed.  Use may redden cotton. If excess	f ROTAM METHOMY ations per crop.	L 29LV per acre per crop.	
Cucumber	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pt 1 Over 1 1/2 pt 3	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 18 pints Do not make more than 12 applic		YL 29LV per acre per crop.	1
Eggplant	Green Peach Aphid	3/4 – 3	5	48 hrs
	Tomato Pinworm (Ground Application Only) Beet Armyworm Corn Earworm	1 1/2 - 3		
	Do not apply more than 15 pints Do not make more than 10 applic		IYL 29LV per acre per crop.	
	Beet Armyworm	1 1/2 - 3	10	48 hrs
Endive, Escarole	Do not apply more than 15 pints Do not make more than 8 applica		YL 29LV per acre per crop.	
Garlic	Beet Armyworm	1 1/2**	7	48 hrs
	Do not apply more than 9 pints o Do not make more than 6 applica ** Add a wetting agent to improve	ations per crop.	L 29LV per acre per crop.	

Grapefruit CA, AZ & HI only	Thrips Fruitree Leafroller Orange Tortrix Western Tussock Moth Beet Armyworm	1 1/2 - 3		72 hrs
	Do not apply more than 9 pints of Do not make more than 4 applicat		YL 29LV per acre per crop.	
Grapes East of Rockies only	Grape Berry Moth (apply pre- & post-bloom & repeat at 10-14 day intervals or as needed) Leafhoppers	1 1/2 - 3	1 - Fresh & Raisin 14 - Wine Grapes	7 days
All U.S.	Omnivorous Leafroller Grape Leaffolder Orange Tortrix			
West of Rockies only	Saltmarsh Caterpillar Leafhoppers*			
	Climbing Cutworm (Treat infestation and repeat at 7-14 day intervals as needed)	3		
CA only	Grape Leaf Skeletonizer*	1 1/2 - 3		
	Thrips	1 1/2 - 3		
Horseradish (Ground	Do not make more than 5 applicat * Leafhoppers & Grape Leaf Skele Aphids Thrips		oplication Only).	48 hrs
application Only)	Do not apply more than 6 pints of Do not make more than 4 applicat		YL 29LV per acre per crop.	
Leafy Green Vegetables: Beet (tops) Dandelions, Kale,	Beet Armyworm Cabbage Looper* Diamondback Moth Imported Cabbageworm	1 1/2 - 3	10	48 hrs
Mustard Greens, Greens, Parsley, Swiss Chard, Turnip Greens	Do not apply more than 12 pints o Do not make more than 8 applicat * Do not use for Cabbage Loopers	ions per crop.	MYL 29LV per acre per crop.	
Lemon CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of Do not make more than 4 applicat		YL 29LV per acre per crop.	
Lentils	Western Yellowstriped Armyworm	1 1/2 - 3	21	48 hrs
	Do not apply more than 3 pints of Do not make more than 2 applicat		YL 29LV per acre per crop.	

Alfalfa Looper	3/4 - 3	3/4-1 1/2 pt 7	48 hrs
Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper	1 1/2 - 3	over 1 1/2 pts. – 10	
Variegated Cutworm	1 1/2		
Do not make more than 15 applicatio days.  Lettuce (leaf varieties)  Do not apply more than 12 pints of	ons per crop; minimu	m interval between treatments is 2  DMYL 29LV per acre per crop.	
Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	11/2-3	1 1/2 pts 1 day over 1 1/2 pts 3 days	48 hrs
Variegated Cutworm	1 1/2		1
		OMYL 29LV per acre per crop.	
Variegated Cutworm Alfalfa Looper	3	14	48 hrs
Flea Beetles	2 1/4 - 3		
		MYL 29LV per acre per crop.	
Thrips	1 1/2 – 3	1	72 hrs
		YL 29LV per acre per crop.	
Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
	Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafthopper Variegated Cutworm Lettuce (head varieties) Do not apply more than 24 pints of Do not make more than 15 application days. Lettuce (leaf varieties) Do not apply more than 12 pints of Do not make more than 8 application days. Loopers Tobacco Budworm Beet Armyworm Granulate Cutworm Flea Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm Variegated Cutworm Affalfa Looper Flea Beetles Do not apply more than 12 application days Do not apply more than 12 application days Thrips Do not apply more than 4 application days Do not make more than 4 application days Armyworms Cereal Leaf Beetle*	Thrips Aphids Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper  Variegated Cutworm  Lettuce (head varieties) Do not apply more than 24 pints of ROTAM METHO Do not make more than 15 applications per crop; minimu days. Lettuce (leaf varieties) Do not apply more than 12 pints of ROTAM METHO Do not make more than 8 applications per crop; mir treatments is 2 days.  Loopers Tobacco Budworm Beet Armyworm Granulate Cutworm Flea Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm  Variegated Cutworm I 1/2  Do not apply more than 18 pints of ROTAM METHO Do not make more than 12 applications per crop.  Variegated Cutworm I 1/2  Do not apply more than 18 pints of ROTAM METHO Do not make more than 12 applications per crop.  Thrips I 1/2 - 3  Do not apply more than 6 pints of ROTAM METHO Do not make more than 4 applications per crop.  Thrips I 1/2 - 3	Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper Variegated Cutworm  Lettuce (head varieties) Do not apply more than 15 applications per crop; minimum interval between treatments is 2 days. Lettuce (leaf varieties) Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 8 applications per crop; minimum interval between treatments is 2 days.  Loopers Tobacco Budworm Beet Armyworm Granulate Cutworm Flea Beetles Melon Aphid Melonworm Flickleworm Fall Armyworm Variegated Cutworm Alfalfa Looper Flea Beetles Do not apply more than 18 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 12 applications per crop.  Variegated Cutworm Alfalfa Looper Flea Beetles Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 4 applications per crop.  Thrips 1 1/2 - 3 1 Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 3 applications per crop.  Thrips 1 1/2 - 3 1  Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 3 applications per crop.  Armyworms Cereal Leaf Beetle*

	Do not make more than 4 applic Chemigation: ROTAM METHOW chemigation. For best results, us 29LV. Apply in 0.1 to 0.2 inches more information.  *Cereal leaf bestle: ROTAM ME cereal leaf bestle eggs when ap be timed to correspond with the egg hatch to achieve maximum currently registered in California.  *Aphids: For aphid control, crop adverse environmental condition Applications on Russian wheat a (<10 adults per stem).	IYL 29LV may be applied to the highest listed rate of water per acre. See CTHOMYL 29LV can provipiled according to label of appearance of newly laid ovicidal effect. Use on the nust be actively growing (such as, extreme temporate to the section of the section).	of ROTAM METHOMYL THEMIGATION section for ride contact ovicidal effect on directions. Application should deggs or in anticipation of is pest stage (egg) is not under stress from operatures or drought).	
Onions	Beet Armyworm	1 1/2 - 3**	7 - Green &	48 hrs
(Green & Dry Bulb)	Thrips* Variegated Cutworm Black Cutworm	3**	Dry Bulb Onions	
	Do not apply more than 18 pints Do not make more than 8 applic treatments is 5 days.  Onlons, dry bulb Do not apply more than 12 pints Do not make more than 8 applic treatments is 5 days.  *Chemigation: ROTAM METHO chemigation to control thips. Be thrips per plant. For best results and a wetting agent. Apply in 0.*CHEMIGATION section for more  **Add a wetting agent to improv	of ROTAM METHOMYL ations per crop; minimur ations per crop; minimur MYL 29LV may be applications before to use the highest rate of 1 to 0.2 inches of water per information.	n interval between  29LV per acre per crop. n treatment interval between ad by overhead sprinkler hrips populations reach 3-5 ROTAM METHOMYL 29LV	
Oranges CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Fruittree Leafroller Beet Armyworm Citrus Cutworm	1 1/2 - 3		72 hrs
	Do not apply more than 9 pints of Do not make more than 4 applic		29LV per acre per crop.	
Peaches	Catfacing Insects (Plant Bugs and Stink Bugs) - begin at petal fall and Continue in cover sprays at 7 to 10-day intervals Oriental Fruit Moth* - begin at petal fall; use trapping devices and frequent field inspection to determine need for treatment. Continue treatment in cover sprays and alternate with residual-	3 pt (or 3/4 pt per 100 gal up to 400 gal per acre)	4	4 days

	type insecticides registered for this use. Green Peach Aphid			
	Do not apply more than 18 pint Do not make more than 6 appli * Oriental Fruit Moth (Ground A	cations per crop.	VYL 29LV per acre per crop.	
Peanuts	Corn Earworm* Potato Leafhopper Fall Armyworm	3/4 – 3	21	48 hrs
	Beet Armyworm	1 1/4 - 3		
	Green Cloverworm Velvetbean Caterpillar Cabbage Looper Soybean Looper ** Thrips Granulate Cutworm	11/2-3		
	Do not apply more than 12 pint Do not make more than 8 appli Do not feed treated vines. * ROTAM METHOMYL 29LV h **Soybean Looper is difficult to Use higher rate for severe infer	cations per crop. as ovicidal and larvicid control. Do not apply		
Pears	Green Fruitworm Oblique banded Leafroller	1 1/2 - 3*	7	48 hrs
Northeast only	Do not apply more than 6 pints Do not make more than 2 appli * Apply in a minimum of 50 gall	cations per crop.		
Peas (succulent) Including: Pigeon peas Chick peas Garbanzo beans Dwarf peas	Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar Variegated Cutworm	1 1/2 - 3	1 - Peas 5 - Forage 14 - Hay	48 hrs
Garden peas Green peas English Peas	Alfalfa Caterpillar Armyworm Green Cloverworm	3/4 - 3		
Field peas Edible pod peas	Do not apply more than 9 pints Do not make more than 6 appli treatments is 3 days. * Do not use for Cabbage Loop	cations per crop; minir		
Pecans Southeast only	Aphids	1 1/2 - 3	30	48 hrs
	Do not apply more than 21 pint Do not make more than 7 appli		MYL 29LV per acre per crop.	
Peppers Including: Bell Hot Pimentos	Loopers Beet Armyworm Green Peach Aphid Armyworm Fall Armyworm	1 1/2 – 3	3	48 hrs
Sweet	Variegated Cutworm	3/4 - 1 1/2		
SMERI				

Pomegranates	Omnivorous Leafroller	3	14	48 hrs
	Do not apply more than 6 pints of Do not make more than 2 applicati		IYL 29LV per acre per crop.	
Potato	Tuberworm* Loopers Aphids Beet Armyworm Leafhoppers Fall Armyworm	1 1/2 - 3	6	48 hrs
	Variegated Cutworm Flea Beetles	1 1/2		
	Do not apply more than 15 pints or Do not make more than 10 applica Chemigation - ROTAM METHOM chemigation. For best results, use 29LV. Apply in 0.1 to 0.2 inches of more information.  "Repeat applications of ROTAM M as needed, to control tuber worm insecticides with different modes of larval populations as low as possifications of the tubers. Failure to a senescence or ying kill increases it	Itions per crop.  YL 29LVmay be at the highest listed water per acre. S  IETHOMYL 29LV pepulations. An apt action may be no lepton to harvest dequately control.	opplied by overhead sprinkler take of ROTAM METHOMYL ee CHEMIGATION section for on a 5-7 day schedule, or longer plication schedule of effective seded to keep foliar feeding to reduce the risk of larval luberworm larvae prior to crop	
Rye	Armyworms Cereal Leaf Beetles Aphids**	3/4 – 1 1/2	7	48 hrs
line	o not apply more than 6 pints of p not make more than 4 applicate Chemigation - ROTAM METHOM chemigation. For best results, use 28LV. Apply in 0.1 to 0.2 inches of more information. *Cereal leaf beetle: ROTAM METH	ions per crop. YL 29LV may be a the highest listed water per acre. S	pplied by overhead sprinkler rate of ROTAM METHOMYL ee CHEMIGATION section for	
	cereal leaf beetle eggs when applibe timed to correspond with the age egg hatch to achieve maximum or currently registered in California.  **Aphids: For aphid control, crop in adverse environmental conditions Applications on Russian wheat apt (<10 adults per stem).	ed according to la pearance of newled picidal effect. Use of nust be actively grangers, extreme	bel directions. Application should y laid eggs or in anticipation of on this pest stage (egg) is not owing and not under stress from temperatures or drought).	
Sorghum Including:	be timed to correspond with the ap egg hatch to achieve maximum ov currently registered in California. **Aphids: For aphid control, crop n adverse environmental conditions Applications on Russian wheat ap	ed according to la pearance of newled picidal effect. Use of nust be actively grangers, extreme	bel directions. Application should y laid eggs or in anticipation of on this pest stage (egg) is not owing and not under stress from temperatures or drought).	48 hrs

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Author: tharri02 Subject: Callout Date: 4/1/2011 11:16:13 AM put on separate line

	Do not apply more than 3 pints of R Do not make more than 2 application * Minimum of 10 gallons per acre by ** Do not apply within 14 days of fe	ons per crop. y ground or 2 ga	illons per acre by air.	
Soybeans	Green Cloverworm Velvetbean Caterpillar Mexican Bean Beetle Corn Earworm - Light to moderate Infestations	2/5 - 3/4 (see Insect Predator section)	14 - Soybeans 3 - Forage 12 - Hay	48 hrs
	Corn Earworm - Moderate to severe infestations	3/4 – 1 1/2		
	Soybean Aphid	1/2 - 1		
	Beet Armyworm Salt Marsh Caterpillar Bean Leaf Beetle Fall Armyworm Thrips Silver Spotted Skipper - Light to moderate Infestations	3/4 – 1		
	Silver Spotted Skipper - Moderate to severe infestations	1 - 1 1/2		
	Do not apply more than 4.5 pints of Do not make more than 3 application		OMYL 29LV per acre per crop.	
Spinach	Alfalfa Looper Cabbage Looper Beet Armyworm Fall Armyworm	1 1/2 - 3	7	48 hrs
	Variegated Cutworm  Do not apply when minimum daily to Do not apply to seedlings less than Do not apply more than 12 pints of Do not make more than 8 application.	3" diameter. ROTAM METHO		
Sugar Beet	Beet Webworm Flea Beetles Carrion Beetles Beet Armyworm* Aphids* Western Yellowstripe Armyworm*	3/4 - 3	30 - Tops 21- Roots	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 15 pints of Do not make more than 10 applicat *Chemigation - ROTAM METHOM themigation to control beet armywe For best results, use the highest list 0.1 to 0.2 inches of water per acre, information.	ROTAM METHO ions per crop. /L 29LV may be irm, aphids and led rate of ROTA	applied by overhead sprinkler western yellowstriped armyworm. AM METHOMYL 29LV. Apply in	
Summer Squash* Including:	Looper Tobacco Budworm	1 1/2 - 3	1 1/2 pt 1 day over 1 1/2 pt 3 days	48 hrs

Crookneck squash Straightneck squash Scallop squash Vegetable marrow Spaghetti squash Hyotan Cucuzza Hechima Chinese okra Bitter melon Balsam pear Balsam apple Chinese Cucumber	Yellowstriped Armyworm Granulate Cultworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm Do not apply more than 18 pints Do not make more than 12 appl * Fruit of the Gourd (Cucurbitac of the fruit is edible cooked or,	lications per crop. eae) family that are c raw, once picked can	onsumed when immature, 100%	
Tangelo, Tangerine CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix, Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints Do not make more than 4 applic	of ROTAM METHOM	YL 29LV per acre per crop.	
Tobacco (Except shade)	Flea Beetle Hornworm	3/4 - 1 1/2	5 - Flue cured 14 - Air or fire cured	
	Loopers Aphids Tobacco Budworm Fall Armyworm	1 1/2		
	Do not apply more than 7.5 pint Do not make more than 5 applic	s of ROTAM METHO	MYL 29LV per acre per crop.	
Tomato (Including Tomatillos*)	Tomato Fruitworm Aphids Hornworm Loopers Beet Armyworm Southern Armyworm Pinworm Armyworm Fall Armyworm	1 1/2 - 3		48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 21 pints Do not make more than 16 appl * For tomatillos do not apply mo acre per crop. Do not make more than 5 applic	lications per crop. ore than 15 pints of R		
Turf (For use on sod farms only)	Sod Webworm (after application, sprinkle irrigate for 15 minutes)	3 (1.1 fl. ozs. per 1000 sq. ft.)		48 hrs
	Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 4 applications per crop. Do not graze or feed.			
Wheat	Armyworms Cereal Leaf Beetle* Aphids**	3/4 - 1 1/2	7	48 hrs

Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 4 applications per crop. Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for

more information.

\*\*Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not

egg hatch to achieve maximum ovious enect. Ose on this peat stage (egg, in the currently registered in California.

\*\*Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought). Applications on Russian wheat aphid need to begin when aphid population is low (<10 adults per stem).

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage: Store in a tightly closed container in a cool, dry place.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Centrol Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal (Nonrefillable container 5 gallens or less): Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rines as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/s full with water and recap. Shake for 10 seconds. Pour rineate into application equipment or a mix tank or store rineate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container: Refill this container with Retarn Methomyl 29LV containing methomyl only. Do not reuse this container for any other purpose. Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Use standard industry practices for cleaning refillable containers.

Spills: For minor spills, leaks, etc., follow precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

31

### Page: 31

Author: thami02 Subject: Replacement Text Date: 4/1/2011 11:17:21 AM DELETE all: rewrite using PR notice and Dupont 352-384 as model

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Rotam Agrochemical Company Limited or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Rotam Agrochemical Company Limited and Seller harmless for any claims relating to such factors.

Rotam Agrochemical Company Limited warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Rotam Agrochemical Company Limited, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW ROTAM LTD MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, Rotam Agrochemical Company Limited or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. To THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM AGROCHEMICAL COMPANY LIMITED AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ROTAM AGROCHEMICAL COMPANY LIMITED OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Rotam Agrochemical Company Limited and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Rotam Agrochemical Company Limited.

Manufactured by: 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Registered: [TBA]

This page contains no comments

32

[Back Page of Booklet - remains on the container when booklet is removed]

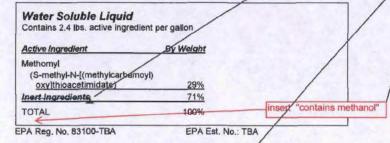
### RESTRICTED USE PESTICIDE

Due to high Acute Toxicity to Humans

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP 1A INSECTICIDE

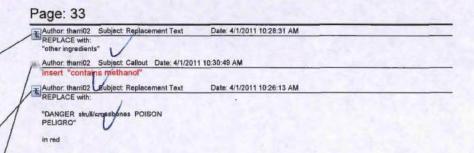
### Rotam Methomyl 29LV Insecticide



Refer to inside label booklet for Directions for Use.

# KEEP OUT OF REACH OF CHILDREN WARNING

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)



### FIRST AID (N-Methyl Carbamate Insecticide)

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

ATROPINE IS AN ANTIDOTE -SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS) get medical attention.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

REPLACE with:

### PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS "DANGER skull/crossbones POISON

PELIGRO"

in red

WARNING. FATAL IF SWALLOWED. CONTAINS METHANOL, MAY CAUSE BLINDNESS. CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE.

Do not get in eyes or on clothing. Wear protective eyewear. Harmful if inhaled or absorbed through skin. Avoid contact with skin or breathing spray mict. Wash hands thoroughly with soap and water after handling.

POISONING SYMPTOMS — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section on the ROTAM METHOMYL 29LV label and seek medical attention at once. NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

TREATMENT — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes untill full atrophization is achieved. Maintain atrophrization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

Page: 34

Author: tharri02 Subject: Callout Date: 4/1/2011 10:26:59 AM

REPLACE with:

"DANGER skull/grossiones POISON PELIGRO"

2.010

in en

Author: tharri02 Subject: Pencil Date: 4/1/2011 10:48:44 AM

Author: tharri02 Subject: Pencil Date: 4/1/2011 10:48:31 AM

Author: tharri02 Subject: Replacement Text

Date: 4/1/2011 10:47:46 AM

REPLACE with

"CONTAINS METHANOL. METHANOL MAY CAUSE BLINDNESS. CAUSES IRREVERSIBLE EYE DAMAGE. MAY BE FATAL IF SWALLOWED OR INHALED. Harmful if absorbed through skin. Do not get in eyes or on clothing. Do not breathe spray mist. Avoid contact with skin. Wash hands thoroughly with soap and water after handling."

### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

### PHYSICAL AND CHEMICAL HAZARDS

Combustible, Do not use or store near heat or open flame. Keep container closed.

Use with adequate ventilation.

add: "The product shows potential explosive properties when heated to elevated temperatures."

Page: 35

Author: tharri02 Subject: Callout, Date 4/1/2011 11:18:47 AM

add: "The product shows potential explosive properties when heated to elevated temperatures."

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Posticide Storage: Store in a tightly closed container in a cool, dry place.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Container Disposal (Nonrefillable container 5 gallons or less): Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

Residue Removal: Triple rince or pressure rince container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rines as follows: Empty the remaining centents into application equipment or a mix tank and centinue to drain for 10 seconds after the flow begins to drip. Hold centainer upside down ever application equipment or mix tank or collect rineate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container: Refill this container with Rotam Methomyl 29LV sontaining methomyl only. Do not reuse this container for any other purpose. Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Use standard industry practices for cleaning refillable containers.

Spills: For minor spills, leaks, etc., follow precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes<sub>1</sub>

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

36

Page: 36

Author: thami02 Subject: Replacement Text / Date: 4/1/2011 11:20:11 AM DELETE all; rewrite using PR notice and Ducont 352-384 as model

207

This page contains no comments

### Registered:

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Net Contents Gallons



### reviews so far for methomyl products

Thomas Harris o Frank Sobotka

03/24/2011 12:20 PM

Dr. Sobotka,

Here are the reviews so far for the pending methomyl products listed below. The product chemistry for the two end-use products are still in process.

### >>> ACTION ITEMS:

81598-O

LABEL - Change % a.i., inert to other, change % other.

83100-ET

LABEL - revise signal word, methanol text, Precautionary text intro, PPE

83100-EI

LABEL - should be ok but check against acute tox review to be sure

TECHNICAL 81598-O

POF

81598-0.product chemistry.20110228. no CBI .pdf

PDF

81598-00009. acute tox review. 20110223.pdf

29LV 83100-ET

FOF

83100-00027.acute tox review.20110228.pdf

90SP 83100-EI

1

83100-00028. acute tox review. 20110310.pdf

Tom Harris
EPA/OCSPP/OPP/RD/IRB
voice: (703) 308-9423
fax: (703) 308-0029
harris.thomas@epa.gov
visit http://www.epa.gov/pesticides



RE: need 83100-ET color info

Frank Sobotka o Thomas Harris

03/16/2011 01:20 PM

History:

This message has been replied to.

See attached revised CSF for 83100-ET and 83100-EI (page 1&2). Both CSF's have been corrected to PROCK/DC/USEPA/US]

CBI removed

> 83100-EI Alt Methomyl 90SP CSF p1&2 rev 03\_16\_11.pdf 83100-ET Alt Methomyl 29LV CSF rev 03\_16\_11.pdf

see csf fibler

83100-ET Addendum pehem

# Memorandum

Date: 3/21/11

To: PM 7, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.

If you have any questions about this process, please contact Teresa Downs (305-5363).

This is a: fully accepted submission

partially accepted submission

☐ rejected submission



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

March 15, 2011

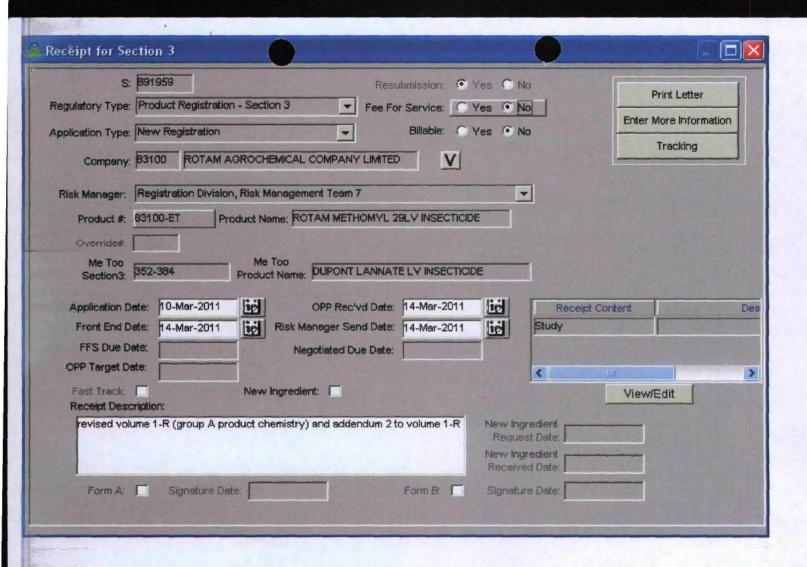
OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

FRANK E. SOBOTKA, PH.D.
IPM RESOURCES LLC
ROTAM AGROCHEMICAL COMPANY LIMITED
7/F CHEUNG TAT CENTRE
4032 CROCKERS LAKE BLVD., STE 818
SARASOTA, FL 43238-

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 14-MAR-11. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.



# Resources LLC

4032 Crockers Lake Bivd., Suite 818, Sarasota, FL 34238 Phone: (215) 497-9501 Fax: (215) 497-9502

484166-00

"an intellectual property management resource company"

March 10, 2011

### VIA UPS EXPRESS NDA

AH CSF olata [RI See 3/15/11 email (CBI) in CSF glder

Harris.Tom@epa.com [REF. \* 1 -703-308-9423]

CHIEF C

superauld by AI+ CSF dated 3/16/11

Document Processing Desk

Office of Pesticide Programs (7504P)

U. S. Environmental Protection Agency

Room S-4900, One Potomac Yard

2777 South Crystal Drive

Arlington, VA 22202-4501

ATTN: John Hebert PM 7/Tom Harris

SUBJECT:

Application for Registration - Rotam Methomyl 29LV Insecticide

Submission of Addendum 2 to Volume 1-R (Group A, Product Chemistry)

EPA File Symbol 83100 - ET

### Dear Mr Harris:

The purpose of this letter is to transmit to the Agency on behalf of Rotam Agrochemical Company Limited an Addendum (ADDENDUM 2) to MRID 48223901 (Volume 1-R/Product Chemistry Group A) for the above subject Product Submission in review. Rotam is requesting that a new MRID number be issued for this report, and, the report addended to MRID 48223901 for review.

Addendum 2 adds corrections to the Basic Confidential Statement of Formula, and, adds a second Confidential Statemet of Formula (Alternate CSF) with supporting information on the Products Identity and Disclosure of Ingredients, including Manufacturing Process, for an Alternative Formulation containing a colorant. The specified Colorant (inert dye) is a Food Grade Colorant approved for direct application and packaging of food products.

The addition of a colorant incorporates better stewarship of the product by alowing the end-user to identify the presence of the product in the tank when mixing and applying the product.

Rotam trusts that the Agency will give this use special consideration when evaluating the products "significant similarity" in composition with respect to FIFRA Section 3(c)(3)(b)(i). The following documents are enclosed with this submission:

John Hebert, PM 7/Tom Harris EPA Registrations Branch March 10, 2011

SUBJECT: Application for Registration, Submission of ADDENDUM 2 to Vol 1-R (Group A, Product Chemistry) - Rotam Methomyl 29LV Insecticide/Continued EPA File Symbol 83100 - ET

Administrative Materials:	(MRID No.:	)	

Transmittal Form (EPA Form 8570-1)

Three copies each of the following:

VOLUME NO.	DESCRIPTION	OPPTS GUIDELINE REF. NO.	MRID NO.
1-R ADDENDUM 2	Product Identity & Disclosure of Ingredients, Including Manufacturing Process/Rotam Methomyl 90SP Insecticide [Report No.: METHMYL29LV]	Group A 830.1550 830.1600 830.1650	48416601

We appreciate your assistance with this Application. If you have any questions or need additional information, please do not hesitate to contact us at any time.

Sincerely yours,

Frank E. Sobotka, Ph.D. Senior Partner IPM Resources LLC (Agent)

ATT:

Please read instructions on	reverse before co. king form.	For			O. Approval expires 2-28-9
<b>⊗EPA</b>	Environmental Protec Washington, DC 2	tion Agency	Registration Amendment  Other		OPP Identifier Number
143	Applica	tion for Pesticide -	Section I		
Company/Product Number     Rotam Agroche	emical Company Ltd / 83100	2. EPA Produc John Heber	t Manager t/Tom Harris	3. Pro	posed Classification
4. Company/Product (Name Rotam Methomyl 29L\	) / Insecticide (83100- ET )	PM# 7			
5. Name and Address of Ap ROTAM Agrochemical Comp C/O IPM Resources LLC (Ad 4032 Crockers Lake Blvd., S Sarasota, FL 34238	pany Limited gent)	(b)(i), my pro	duct is similar or id  No. 352-384  DuPont Lann	entical in co	FIFRA Section 3(c)(3) mposition and labeling
		Section - II			
Amendment - Explair Resubmission in res	ponse to Agency letter dated	Agen "Me	printed labels in repso cy letter dated Foo" Application. - Explain below.	onse to	
Insecticide (83100-ET). into the Basic Formulatio					
1. Material This Product Wi	T	I			
Child-Resistant Packaging Yes No	Unit Packaging  Yes  No	Water Soluble Packagii  Ves No	ng 2. Type	of Container  Metal  Plastic Glass	
* Certification must be submitted	If "Yes" No. per Unit Packaging wgt. Container		. per ntainer	Paper Other (S	pecify)
	Container 1qt,	Retail Container 1 gal, 2.5 gal, 15 gal, bulk	5. Location of	Label Directio	ns
6. Manner in Which Label is Printed or	Affixed to Product glued	ograph er glued noiled	Other		
	26	Section - IV			Pa-Ma-1
- A	items directly below for identifica		cted, if necessary, to	1	
Name Frank E. Sobotka, Ph.I	0.	Agent		215 497	No. (Include Area Code) -9501
	Certifi ments I have made on this form a ny knowlinglly false or misleading s law.	nd all attachments thereto a			6. Date Application Repeiped (Stamped)
2. Signature		3. Title Agent		::::	
4. Typed Name Frank E. Sobotka, Ph.D	).	5. Date March 10	, 2011	::::	

83100-ET REMused perom

# Memorandum

Date: 3/21/11

To: PM 7, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.

If you have any questions about this process, please contact Teresa Downs (305-5363).

This is a: 

fully accepted submission

☐ partially accepted submission

☐ rejected submission



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

March 15, 2011

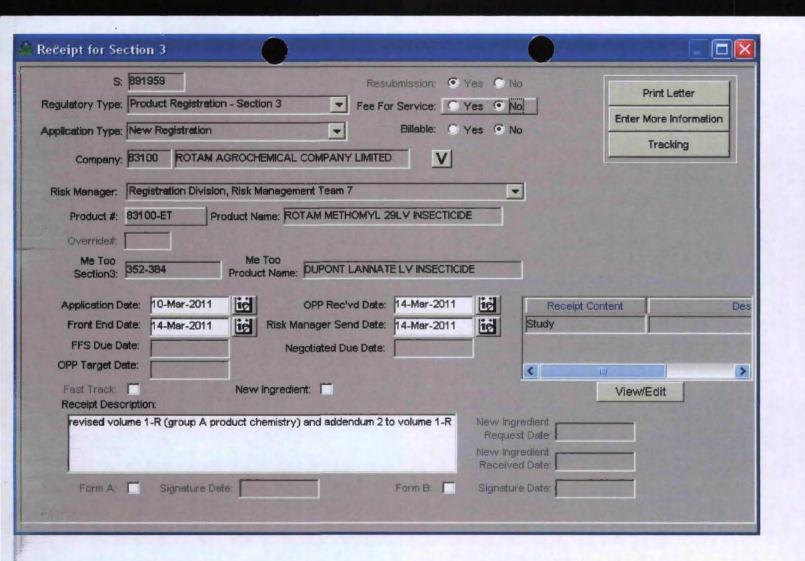
OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

FRANK E. SOBOTKA, PH.D.
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Thank you for your submittal of 14-MAR-11. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

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# IPM Resources LLC

4032 Crockers Lake Blvd., Sulte 818, Sarasota, FL 34238 Phone: (215) 497-9501 Fax: (215) 497-9502

484167-00

"an intellectual property management resource company"

March 10, 2011

VIA UPS EXPRESS NDA

Harris.Tom@epa.com [REF. **\*** 1 -703-308-9423]

Document Processing Desk
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501
ATTN: John Hebert PM 7/Tom Harris

SUBJECT:

Application for Registration - Rotam Methomyl 29LV Insecticide Submission of Revised Volume 1-R (Group A, Product Chemistry)

EPA File Symbol 83100 - ET

Dear Mr Harris:

The purpose of this letter is to transmit to the Agency on behalf of Rotam Agrochemical Company Limited a Revised Copy of MRID 48223901 (Volume 1-R/Product Chemistry Group A) for the above subject Product Submission in review. Rotam is requesting that a new MRID number be issued for this report, and, the report addended to MRID 48223901 for review.

This Revised Report adds corrections to the Basic Confidential Statement of Formula requested by Product Chemistry Reviewer, Shyam Mathur. It also corrects the nominal concentration of the Technical Active Ingredient (81598-O) in the composition of formulation.

The following documents are enclosed with this submission:

Administrative Materials: (MRID No.:

Transmittal Form (EPA Form 8570-1)

Three copies each of the following:

John Hebert, PM 7/Tom Harris EPA Registrations Branch March 10, 2011

SUBJECT: Application for Registration - Rotam Methomyl Insecticide/Continued Submission of Revised Vol 1-R (Product Chemistry Report, Group A), EPA File Symbol 83100 - ET

VOLUME NO.	DESCRIPTION	OPPTS GUIDELINE REF. NO.	MRID NO.
1-R (REVISED)	Product Identity & Disclosure of Ingredients, Including Manufacturing Process/Rotam Methomyl 29LV Insecticide [Report No.: METHMYL29LV]	Group A 830.1550 830.1600 830.1650	48416701

We appreciate your assistance with this Application. If you have any questions or need additional information, please do not hesitate to contact us at any time.

Sincerely yours,

Frank E. Sobotka, Ph.D. Senior Partner IPM Resources LLC (Agent)

ATT:

Please read instructions or		form.		Form Approve	Registra		O. Approval expires 2-28-9 OPP Identifier Number
<b>\$EPA</b>	<b>Environmental P</b>	model variation and the	gency	1	Amend		
	Ap	plication for	Pesticide	- Section	n I		
Company/Product Numb     Rotarn Agroch	nemical Company Ltd /	83100	2. EPA Pro John He	oduct Manager bert		3. Pr	roposed Classification
4. Company/Product (Nam Rotam Methomyl 29L	o) V Insecticide (83100- E	ET)	PM# 7			V	Nostricted
ROTAM Agrochemical Corr C/O IPM Resources LLC (A 4032 Crockers Lake Blvd., Sarasota, FL 34238	gent)		The second secon	product is sing. No. 352		tical in co	FIFRA Section 3(c)(3) emposition and labeling
		Se	ction - II				
Resubmission in res  Notification - Explai	sponse to Agency letter dat	ted	_ <u> </u> -	inal printed lab gency letter da Me Too" Appli Ither - Explain I	ated cation.	e to	
	Confidential Statement of nd other minor corrections	to the CSF requi				on of the	Technical active
1. Material This Product W	ill Be Packaged In:						
Child-Resistant Packaging Yes No * Certification must be submitted		lo. per if "Y	er Soluble Paci Yes No Yes" (age wgt	No. per container	2. Type of	Metal Plastic Glass Paper Other (S	
3. Location of Net Contents	s Information 4.	Size(s) Retail Cont		I r.	ocation of Lak	oel Direction	ons
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2. Signature	a Soft	3. Title Agen					:-::-
4. Typed Name Frank E. Sobotka, Ph.		5. Date		07, 2011		::::	

# RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP

1A

INSECTICIDE

# Rotam Methomyl 29LV Insecticide

Water Soluble Liquid

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient By Weight

Methomyl

VOHRON

Searchard

(S-methyl-N-[(methylcarbamoyl)

oxylthioacetimidate) 29%

Inert-Ingredients 71%

TOTAL methanol

100%

EPA Reg. No. 83100-TBA

EPA Est. No.: TBA

KEEP OUT OF REACH OF CHILDREN
WARNING

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional Precautionary Statements on inside booklet and back panel of container and Directions for Use on inside booklet.

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Net Contents Gallons

# RESTRICTED USE PESTICIDE

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GROUP

1A

INSECTICIDE

Rotam Methomyl 29SL Insecticide

KEEP OUT OF REACH OF CHILDREN

DANGER & POISON

ANDE

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### FIRST AID

(N-Methyl Carbamate insecticide)

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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# PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

MARRO & WARNING. FATAL IF SWALLOWED, CONTAINS METHANOL: MAY CAUSE BLINDNESS. CORROSIVE. CAUSES IRREVERSIBLE EYE-DAMAGE

Do not get in eyes or on clothing. Wear protective eyewear. Harmful if inhaled or absorbed through skin. Avoid contact with skin or breathing spray mist. Wash hands thoroughly with soap and water after handling.

POISONING SYMPTOMS — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section on the ROTAM METHOMYL 29LV label and seek medical attention at once.

#### NOTE TO PHYSICIAN

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Probable mucosal damage may contraindicate the use of gastric lavage. TREATMENT — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement

Protective Equipment (PPE), User Safety Recommendations, Engineering
Controls Statements, Environmental Hazards and Directions for Use

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient	By Weight
Methomyl	
(S-methyl-N-[(methylcarbamoyl) oxy]thioacetimidate)	29%
Inert Ingredients	71%
TOTAL	100%

EPA Reg. No. 83100 - TBA EPA Est. No.: TBA

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Contains not

**Net Contents** Gallons

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PRECAUTIONARY STATEMENTS (Continued)

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING DANGER

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category B on an EPA chemicalresistance category

Applicators and others exposed to the diluted spray solution must wear: 2 no date

Long-sleeved shirt and long pants.

Chemical resistant gloves such as barrier laminate or butyl rubber.

Shoes plus socks.

Protective eyewear

Mixers, loaders, cleaners, repairers of application equipment, and others exposed to the concentrate must wear:

Long sleeve shirt and long pants.

natural rule Chemical-resistant gloves, such as barrier laminate or butyl rubber.

Socks and chemical resistant footwear.

Protective eyewear.

Respirator as outlined below.

Chemical resistant apron.

For exposures in enclosed areas respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister

with any R, P, or HE prefilter.

For exposures outdoors, Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any R, P, or HE prefilter. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other

#### ENGINEERING CONTROL STATEMENTS

Human flaggers must be in enclosed cabs.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must not assist in the mixing and loading operations.

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# USER SAFETY RECOMMENDATIONS USERS SHOULD:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- · Remove personal protective equipment immediately after handling this product.
- Wash the outside of gloves before removing.
- As soon as possible, wash thoroughly and change into clean clothing.

- Remove and wash contaminated clothing before reuse.

## **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to interfidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

#### PHYSICAL AND CHEMICAL HAZARDS

Johan heated to directed temperatures.

Combustible. Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation. The product shows potential explaine properties

# DIRECTIONS FOR USE Restricted Use Pesticide

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). REI Summary: REI grapes = 7 day; REI peaches = 4 day; REI apple, cotton, grapefruit, lemon, nectarine, orange, tangelo, tangerine = 3 day; all other WPS uses = 48 hour REI.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls.

Chemical-resistant gloves, such as barrier laminate or butyl rubber.

Shoes plus socks.

Protective eyewear.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Notify workers of the application to grapes by warning them orally and by posting Warning signs at entrances to treated areas.

# APPLICATION

#### GENERAL INFORMATION

Chemigation: Overhead sprinkler chemigation is allowed for use in alfalfa, barley, succulent and dry beans, oats, onions, succulent peas, potatoes, rye, sugar beets, sweet corn and wheat. Drip chemigation is allowed for onions. See Federal Supplemental labeling for overhead sprinkler chemigation directions for use in sweet corn, succulent peas and succulent and dry beans; and for directions for use for drip chemigation in onions. Refer to supplemental, or Special Local Need (SLN) labeling or the crop specific sections of this label for use directions for chemigation. Do not apply this product through any other type of irrigation systems, except those allowed by instructions provided in a supplemental, SLN or this product label.

Do not formulate this product into other End-use products without written permission from Rotam.

ROTAM METHOMYL 29LV insecticide should be used only in accordance with directions for use on this label or in separate Rotam supplemental labeling. Rotam will not be responsible for use of the product in a manner not specified by Rotam in the product's labeling and User assumes all risk for such use.

ROTAM METHOMYL 29LV is a water soluble liquid that is applied by foliar application to control many important insect pests. ROTAM METHOMYL 29LV is mixed with water for application.

Pilots must not assist in the mixing and loading operations.

Do not apply by ground equipment within 25 feet, or by air within 100 feet of

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lakes, reservoirs, rivers, estuaries, commercial fish ponds and natural, permanent streams, marshes or natural, permanent ponds. Increase the buffer zone to 450 feet from the above aquatic areas when ultra low volume application is made.

Hand-held equipment is prohibited for applications to crops. This product must be applied to crops only with mechanical ground, overhead sprinkler chemigation or aerial application equipment.

Use only in commercial and farm plantings. Not for use in home plantings. Not for use during any period after a commercial crop site is opened for public entry as a "U-Pick", "Pick Your Own" or similar operation; in no case shall preharvest applications be made after first public entry. The restricted entry interval and preharvest interval for the crop stated elsewhere on this label must be followed.

#### SCOUTING

Monitor insect populations to determine whether or not there is a need for application of ROTAM METHOMYL 29LV based on locally determined economic thresholds. More than one treatment of ROTAM METHOMYL 29LV may be required to control a population of pests.

# **BENEFICIAL ARTHROPODS**

ROTAM METHOMYL 29LV at rates of 2/5 to 3/4 pint per acre helps conserve certain beneficials, including big-eyed bugs, damsel bugs, flower bugs and spiders in cotton and soybeans. While these beneficials cannot be relied upon to control pests, they are of potential value and should be monitored along with pests in pest management programs on these crops.

## RESISTANCE MANAGEMENT

For resistance management, ROTAM METHOMYL 29LV insecticide is a group 1A insecticide. Repeated and exclusive use of ROTAM METHOMYL 29LV or other group 1A insecticides may lead to the build-up of resistant strains of insects in some crops. Not all members of this group have been shown to be cross-resistant. Different resistance mechanisms that are not linked to target site of action, such as enhanced metabolism, are common for this group of chemicals. Alternation of compounds from different sub-groups within this group may be an acceptable part of an integrated pest management program.

Some insects are known to develop resistance to products used repeatedly for control. When this occurs, the recommended dosages fail to suppress the pest population below the economic threshold. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode-of-action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of

control for your area. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at <a href="http://www.irac-online.org">http://www.irac-online.org</a>.

### INTEGRATED PEST MANAGEMENT

This product should be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

## SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying ROTAM METHOMYL 29LV.

Fill spray tank 1/4 to 1/2 full of water. Add ROTAM METHOMYL 29LV directly to spray tank. Mix thoroughly. Use mechanical or hydraulic means; do not use air agitation. Spray mix should not be stored overnight in spray tank.

Compatibility — Since formulations may be changed and new ones introduced, in this situation users can premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.) before applying the product. Avoid mixtures of several materials and very concentrated spray mixtures.

Do not use ROTAM METHOMYL 29LV with Bordeaux mixture (copper sulfate and hydrated lime), Du Ter triphenyltin hydroxide, lime sulfur, Rayplex iron nor in highly alkaline solutions. Use mildly alkaline mixtures immediately after mixing to prevent loss of insecticidal activity.

Tank Mix Sequence – Add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after addition of each product.

- Water soluble bags.
- 2. Water dispersible granules
- 3. Wettable powders
- 4. Water based suspension concentrates
- 5. ROTAM METHOMYL 29LV and other water soluble concentrates
- 6. Oil based suspension concentrates
- 7. Emulsifiable concentrates
- Adjuvants, surfactants, oils, soluble fertilizers, and drift retardants. Follow local practice and manufacturer's recommendation.

### **APPLICATION**

Apply at the recommended rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Follow-up treatments of ROTAM METHOMYL 29LV should be applied, as needed, to keep pest populations within threshold limits. On most crops, ROTAM

METHOMYL 29LV should be applied at 5 to 7 day intervals to maintain control. Refer to crop specific directions for use in the crop tables for more specific information on treatment intervals.

Use sufficient water to obtain thorough, uniform coverage. Since ROTAM METHOMYL 29LV is a fast acting contact insecticide, best results follow direct spraying of the target insect.

For aerial, use a minimum of 2 gals, per acre (gpa) except 10 gpa for-grapes, peaches, and nectarines; 15 gpa for oranges, lemons, grapefruit, tangelos and tangerines.

ROTAM METHOMYL 29LV is recommended for use as a low volume aerial spray 0.53 gpa (2L) for cotton\* and soybeans\* and 1 gpa for the crops listed below providing the following conditions are met:

- -equipment is adjusted to distribute spray uniformly over the spray swath,
- wind conditions and other factors such as temperature and humidity are such
- -that the spray is delivered to the target area,
- -local regulations do not prohibit low-volume aerial sprays,
- -use rates are applied as directed on the package label or supplemental labeling for the following crops:

Alfalfa Celery Peas (succulent) Peppermint Anise Collards Asparagus Corn Peppers Cotton Potato Barley Beans Cucumber Rye Lettuce Broccoli Soybean Spinach Brussels sprouts Melons Sugar beet Cabbage Mint Carrot Oats Summer Squash Cauliflower Peanuts Wheat

Apply the low rates on small plants, small insects and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use 1 to 3 applications of the highest recommended rate for controlling severe infestations. Hereafter, use the lowest rate possible to maintain control.

\* Not Registered for aerial application in a diluted volume of less than 1 gal in CA.

### SPRAY TANK CLEANOUT

Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

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CHEMIGATION

Instructions for the Use of ROTAM METHOMYL 29LV on Alfalfa, Barley, Oats, Green and Dry Bulb Onions, Potatoes, Rye, Sugar Beets and Wheat Using Overhead Sprinkler Chemigation

Overhead chemigation applications offer the advantage of greater penetration and coverage of the target plant. However, typical chemigation applications are more dilute than ground or aerial applications. For best results, it is recommended to keep the concentration of ROTAM METHOMYL 29LV as high as possible in the application. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre.

ROTAM METHOMYL 29LV is most active as a contact insecticide, although it does also have activity via ingestion of treated plants. For best results, applications of ROTAM METHOMYL 29LV should take place when the insects are active and most likely to come into direct contact with the application.

Types of Irrigation Systems:

ROTAM METHOMYL 29LV may be applied through overhead sprinkler irrigation systems for control of various pests. The irrigation system used must provide uniform water distribution. Do not use filter screens smaller than 50 mesh throughout the system, due to possible build up of material on 100 mesh or smaller screens. Do not apply ROTAM METHOMYL 29LV through any other type of irrigation systems, except those allowed by instructions provided in a supplemental, SLN, or this product label.

# General Directions for Chemigation: Preparation

A pesticide tank is recommended for the application of ROTAM METHOMYL 29LV in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Add 1/4 to 1/2 of the desired amount of water and then measure the required amount of ROTAM METHOMYL 29LV into the tank. Complete filling the tank by adding the required amount of water. Agitate thoroughly to insure a uniform solution of ROTAM METHOMYL 29LV. Once in solution, no further agitation is required. Injection solution should not be stored overnight. Highly alkaline water should be buffered so that the pH of the spray solution is in the range of neutral to slightly acidic (pH5-7).

Injection into Chemigation Systems

Inject the proper amount of the ROTAM METHOMYL 29LV.solution into the irrigation water flow using a positive displacement injection pump. Injection should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water.

### **Uniform Water Distribution**

The irrigation system used for application of ROTAM METHOMYL 29LV must provide for uniform distribution of ROTAM METHOMYL 29LV treated water. Non-uniform distribution might result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.

Equipment calibration

Calibrate the irrigation system and injector before applying ROTAM METHOMYL 29LV. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, you should contact your state extension service specialists, equipment manufacturer or other experts.

**Monitoring of Chemigation Applications** 

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for cleaners and repairers of application equipment when making adjustments or repairs on the chemigation system when ROTAM METHOMYL 29LV is in the irrigation water.

Required System Safety Devices

Do not connect any irrigation system used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction.

There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

Posting of Areas to be Treated

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any other public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to all the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The signs shall be printed in ENGLISH. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color, which sharply contrasts with their immediate background. At the top of the sign shall be the words "KEEP OUT", followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word "STOP". Below the symbol shall be the words "PESTICIDE IN IRRIGATED WATER".

Posting for chemigation does not replace other posting and reentry requirements for farm worker safety.

Operation

Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injection system according to the directions above. This procedure is necessary to deliver the desired rate per acre in a uniform manner. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system. End guns must be turned off during the application, if they irrigate nontarget areas or if they do not provide uniform application and coverage.

Nozzles in the immediate area of control panels, chemical supply tanks, wellheads and system safety devices must be plugged to prevent contamination of these areas.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Do not apply when system connections or fittings leak or when nozzles do not provide uniform distribution.

Cleaning the System

Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner's manual or your local equipment dealer for cleanout procedures for your injection system.



Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

 The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

# AERIAL DRIFT REDUCTION ADVISORY INFORMATION Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See **Wind, Temperature and Humidity,** and **Temperature Inversions** sections of this label.

### Controlling Droplet Size - General Techniques

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle.
   Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

### Controlling Droplet Size - Aircraft

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released parallel
  to the airstream produces larger droplets than other orientations and is the
  recommended practice. Significant deflection from horizontal will reduce
  droplet size and increase drift potential.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types and the lowest drift.
- Boom Length For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift

without reducing swath width.

- Application Height Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
- Swath Adjustment When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downward edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

#### **BOOM HEIGHT**

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. AVOID GUSTY OR WINDLESS CONDITIONS.

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

### TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

## **TEMPERATURE INVERSIONS**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind.

However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

## AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

**Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

## AIR ASSISTED (AIR BLAST) TREE AND VINE SPRAYERS

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides. In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift;

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	RE
Alfalfa	Pea Aphid Lygus Bugs Blotch Leafminer Aphids Egyptian Alfalfa Weevil Larvae Loopers Beet Armyworm Armyworm Alfalfa Caterpillar Fall Armyworm Western Yellowstriped Armyworm Yellowstriped Armyworm	1 1/2 – 3	7*	48 hr
	Alfalfa Weevil Larvae	3		
	Variegated Cutworm	3/4 - 3		

	Do not make more than 10 application Chemigation: ROTAM METHOMYL 2 chemigation. For best results, use the 29LV. Apply in 0.1 to 0.2 inches of with more information.  — Do wt wolk	9LV may be applied highest listed rate	of ROTAM METHOMYL	(to gray	
Anise (Fennel)	Cabbage Looper	3	7	48 hrs	
	Beet Armyworm	1 1/2 - 3			
	Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 10 applications per crop.				
	Apple Aphid Rosy Apple Aphid Tufted Apple Budmoth Green Fruitworm Tarnished Plant Bug	1 1/2 - 3 *	14	72 hrs	
	Codling Moth (10-12 day spray intervals)	====			
Apple Ground application only	Leafrollers (Fruit-tree, Obliquebanded, Redbanded, Variegated) Lesser Appleworm White Apple Leafhopper Tentiform Leafminer Cutworm	3*			
	Do not use on Early Macintosh & We Do not apply more than 15 pints of R Do not make more than 5 application treatments is 7 days.  * Apply in a minimum of 50 gallons of	OTÁM METHOMY s per crop; minimu			
Asparagus	Beet Armyworm, Western Yellowstriped Armyworm Asparagus Beetle Spotted Asparagus Beetle White Cutworm Redbacked Cutworm	1 1/2 - 3		48 hrs	
	Variegated Cutworm	1 1/2			
	Do not apply more than 15 pints of R Do not make more than 8 application		L 29LV per acre per crop.		
Avocado	Western Avocado Leafroller Omnivorous Looper Do not apply more than 3 pints of RO	1 1/2 - 3 TAM METHOMYL	1 . 29LV per acre per crop.	48 hrs	
	Do not make more than 2 application  Armyworms  Cereal Leaf Beetle*	s per crop.	7	48 hrs	

	more information.  *Cereal leaf beetle: ROTAM cereal leaf beetle eggs whe be timed to correspond with egg hatch to achieve maxim currently registered in California.	THOMYL ts, use the ches of water the applied the appli	29LV may be applied highest listed rater per acre. See MYL 29LV can per according to label earance of newly lidal effect. Use on st be actively growuch as, extreme to	te of ROTAM METHOMYL c CHEMIGATION section for rovide contact ovicidal effect on el directions. Application should laid eggs or in anticipation of this pest stage (egg) is not wing and not under stress from emperatures or drought).	
Beans (Succulent) Including: Kidney Lima Mung	Leafhopper Mexican Bean Beetle		3/4 – 3	Succulent Beans - 3/4 - 1 1/2 pts 1, over 1 1/2 pts 3; 3 - Vines 7 - Hay	48 hrs
Navy Pinto Snap	Fall Armyworm Variegated Cutworm		1 1/2	r - nay	
Wax Broad Fava Asparagus Blackeyed peas Cowpeas Chick peas Garbanzo beans Sweet lupine White sweet lupine White lupine Grain lupine	Beet Armyworm Corn Earworm Saltmarsh Caterpillar, Yellowstriped Armyworm Western Yellowstriped Army Lygus Bugs Thrips Aphids Loopers*	n Earworm marsh Caterpillar, owstriped Armyworm stern Yellowstriped Armyworm us Bugs ps ids			
	European Corn Borer (Ovicide & Larvicide) Ini when moth flights first app and-continue preventive treatments at 3-4 day inte To control eggs and larva	pear ervals			
	Spotted Cucumber Beetle 3/4 – 1 1/2		3/4 - 1 1/2		
	Do not apply more than 15 p Do not make more than 10 a * Do not use for Loopers in a	application	ons per crop.	YL 29LV per acre per crop.	
Beans (Dry) (Same as Succulent Beans)	(Same as Succulent Beans)	Suc	me as culent ans)	14 - Dry Beans * 14 - Vines * 14 - Hay *	48 hrs
	Do not apply more than 15 p make more than 10 applicat Do not use for Loopers in Al *Do not apply within 14 days	re than 15 pints of ROTAM METHOMYL 29LV/acre /crop. Do not 10 applications per crop. oopers in AL & GA.			
Beets (Table)	Imported Cabbageworm	3/4	1-3	0 - roots	48 hrs
	Beet Armyworm Cabbage Looper Diamondback Moth	1 1	/2 - 3	10 -tops	

	Cucumber Beetle Variegated Cutworm	1 1/2		
	Do not apply more than 12 p Do not make more than 8 ap		DMYL 29LV per acre per crop.	
Bermudagrass pasture	Fall Armyworm Armyworm Striped Grass Looper	3/4 - 3	7 - Forage * 3 - Dehydrated Hay **	48 hrs
	Do not apply more than 3 pin Do not make more than 4 ap * Do not apply within 7 days ** Do not apply within 3 days	oplications per crop. of feeding forage or allo	MYL 29LV per acre per crop.	
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil Sharp-Nosed Leafhopper	1 1/2	3	48 hrs
	Cranberry Fruitworm* Cherry Fruitworm*	1 1/2 – 3		- 10
	Flea Beetle (larvae) Sawfly (larvae) Blueberry Leafroller	3		
	Blueberry Maggot	3/4-1 1/2		
Broccoli	not make more than 4 applic * For ground use only.  Loopers Diamondback Moth	1 1/2 - 3**	3	48 hrs
	Imported Cabbageworm	3/4 - 3**		
	Do not apply more than 21 pints of ROTAM METHOMYL29LV/acre/crop Do not make more than 10 applications per crop; minimum interval between treatments is 2 days.  ** Add a wetting agent to improve coverage.			
	Do not make more than 10 a treatments is 2 days.	applications per crop; m	MYL29LV/acre/crop inimum interval between	
Brussels Sprouts	Do not make more than 10 a treatments is 2 days.	applications per crop; m	MYL29LV/acre/crop inimum interval between 3	48 hrs
Brussels Sprouts	Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to im  Loopers Imported Cabbageworm,	applications per crop; mi prove coverage.	inimum interval between	48 hrs
Brussels Sprouts	Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to im Loopers Imported Cabbageworm, Diamondback Moth Variegated Cutworm	prove coverage.  1 1/2 - 3 **  1 1/2 **  pints of ROTAM METHO	3  OMYL 29LV per acre per crop.	48 hrs
Brussels Sprouts Cabbage	Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to im Loopers Imported Cabbageworm, Diamondback Moth Variegated Cutworm Do not apply more than 18 p Do not make more than 10 a treatments is 2 days.	prove coverage.  1 1/2 - 3 **  1 1/2 **  pints of ROTAM METHO	3  OMYL 29LV per acre per crop.	48 hrs
	Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to im  Loopers Imported Cabbageworm, Diamondback Moth  Variegated Cutworm  Do not apply more than 18 p Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to im  Loopers * Diamondback Moth	prove coverage.  1 1/2 - 3 **  1 1/2 **  Dints of ROTAM METHO applications per crop; minus  prove coverage.  1 1/2 - 3 **	MYL 29LV per acre per crop. inimum interval between	
	Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to im  Loopers Imported Cabbageworm, Diamondback Moth  Variegated Cutworm  Do not apply more than 18 p Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to im  Loopers * Diamondback Moth Fall Armyworm  Imported Cabbageworm  Variegated Cutworm	prove coverage.  1 1/2 **  1 1/2 **  Dints of ROTAM METHO applications per crop; misprove coverage.  1 1/2 - 3 **  1 1/2 - 3 **  1 1/2 **	3  OMYL 29LV per acre per crop. inimum interval between	
	Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to im  Loopers Imported Cabbageworm, Diamondback Moth  Variegated Cutworm  Do not apply more than 18 p Do not make more than 10 a treatments is 2 days.  ** Add a wetting agent to im  Loopers * Diamondback Moth Fall Armyworm  Imported Cabbageworm  Variegated Cutworm  Do not apply more than 24 p	prove coverage.  1 1/2 **  1 1/2 **  Dints of ROTAM METHOR applications per crop; minimum of ROTAM METHOR applications per crop; minimum of ROTAM METHOR and the second of ROTAM METHOR and the second of ROTAM METHOR and the second of ROTAM METHOR applications per crop; minimum of ROTAM METHOR applications p	OMYL 29LV per acre per crop. inimum interval between  1  OMYL 29LV per acre per crop. minterval between treatments is 2	48 hrs

	Variegated Cutworm	3/4 - 1 1/2			
	Do not apply more than 21 pint Do not make more than 10 app		MYL 29LV per acre per crop.		
Cauliflower	Imported Cabbageworm	3/4 – 3 **	- 3	48 hrs	
	Loopers Diamondback Moth	1 1/2 – 3 **			
	Variegated Cutworm	1 1/2 **			
Celeny	Do not apply more than 24 pint Do not make more than 10 app treatments is 2 days.  ** Add a wetting agent to impro	lications per crop; mir			
Celery	Beet Armyworm Aster Leafhopper	1 1/2 – 3	7	48 hrs	
	Loopers	3			
	Variegated Cutworm	1 1/2		1	
	Armyworms	3/4 - 3		1	
	Do not apply more than 24 pint Do not make more than 10 app	s of ROTAM METHOI lications per crop.	MYL 29LV per acre per crop.		
Chicory	Beet Armyworm Variegated Cutworm Leafhoppers	1 1/2 - 3	80	48 hrs	
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 2 applications per crop.				
Chinese Cabbage	Loopers Beet Armyworm	1 1/2 - 3*	10	48 hrs	
	Do not apply more than 24 pints Do not make more than 10 app * Minimum of 25 gallons water	lications per crop.			
Collards (Fresh market	Diamondback Moth Variegated Cutworm	1 1/2	10	48 hr	
only)	Imported Cabbageworm Beet Armyworm Loopers*	1 1/2 - 3			
	Do not apply when temp. is less tall.  Do not apply more than 18 pints Do not make more than 8 applie  * Do not use for Loopers in AL	s of ROTAM METHOR			
Corn (Field, Popcorn & Seed)	Earworm – (Ovicide/Larvicide) Armyworm Fall Armyworm European Corn Borer Ears 1-3 days or as needed Corn Rootworm (adult beetles) Flea Beetles Picnic Beetles Aphids	3/4 – 1 1/2	21 - Ears 3 - Forage* 21 - Stover*	48 hr	

	Do not make more than 10 applica *Corn forage is green actively grow The plants can be fed directly to an parts of the plant that remain after remaining stalks and leaves can be	ving plants that are had nimals or used to make removal of the grain	ke silage. Corn stover are the at full plant maturity. These	
	EarwormWhorl as needed	1 – 1 1/2	0 -Ears	48 hrs
	Fall Armyworm Armyworm Earworm, (Ovicide/Larvicide) European Corn Borer -Ears 1-3 days or as needed Corn Rootworm (adult beetles) Flea Beetles Picnic Beetles Aphids	3/4 – 1 1/2	3 - Forage 21 - Stover	
Corn (Sweet) Cotton - All US	Variegated Cutworm Beet Armyworm	1 1/2		
	Certain hybrid varieties of sweet confirmation and area to determine cross Do not apply more than 21 pints of Do not make more than 28 applications treatments is 1 day.	op safety before full s ROTAM METHOMY	cale spraying. L 29LV per acre per crop.	
	Ovicide/Larvicide - Bollworm Tobacco Budworm Initiate schedule when significant numbers of eggs are present Continue at 3 to 5-day intervals while eggs are present and larval control is adequate. If significant larvae survive, use higher rates below. Lygus Bugs/Plant Bugs (adults and nymphs) Start treatment on low level Population for suppression.	2/5 - 3/4 (see Insect Predator Section)	15	72 hrs
	Cotton Leafworm	3/4 - 1 1/2		
	Cotton Fleahopper (as needed)	2/5 – 3/4		
	Aphids, Thrips	3/4		
East of Rockies only	(Early Season) Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/PlantBugs (adults and nymphs) Use as occasional spray in regular schedule but not more often than every 10 days.	1 1/2		
	(Late Season)	1 1/2 - 2 1/4		

Texas	Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/Plant Bugs (adult and nymphs) Up to 3 applications at 3-5 day intervals after desired boll load set on plants. Cotton Aphid	3/4 – 2			
West of Rockies only	Larvicide for worms: Bollworm Fall Armyworm Tobacco Budworm Lygus Bugs Beet Armyworm	1 1/2 – 2 1/4			
	Cotton Leafperforator  For applications West of the Rock desired boll load set on plants.  For all applications made to cot Do not apply more than 6 pints of Do not make more than 8 application not graze or feed.  Use may redden cotton. If excess	ton in the United S ROTAM METHOMY tions per crop.	tates: 'L 29LV per acre per crop.		
Cucumber	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pt 1 Over 1 1/2 pt 3	48 hrs	
	Variegated Cutworm	1 1/2			
	Do not apply more than 18 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 12 applications /crop.				
Eggplant	Green Peach Aphid	3/4 – 3	5	48 hrs	
	Tomato Pinworm (Ground Application Only) Beet Armyworm Corn Earworm	1 1/2 - 3			
4 =	Do not apply more than 15 pints of Do not make more than 10 applications		YL 29LV per acre per crop.		
	Beet Armyworm	1 1/2 - 3	10	48 hrs	
Endive, Escarole	Do not apply more than 15 pints of Do not make more than 8 applications		YL 29LV per acre per crop.		
Garlic	Beet Armyworm	1 1/2**	7	48 hrs	
	Do not apply more than 9 pints of Do not make more than 6 applicat ** Add a wetting agent to improve	ROTAM METHOMY tions per crop.	'L 29LV per acre per crop.		

Grapefruit CA, AZ & HI only	Thrips Fruitree Leafroller Orange Tortrix Western Tussock Moth Beet Armyworm	1 1/2 - 3		72 hrs		
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.					
Grapes East of Rockies only	Grape Berry Moth (apply pre- & post-bloom & repeat at 10-14 day intervals or as needed) Leafhoppers	1 1/2 - 3	1 - Fresh & Raisin 14 - Wine Grapes	7 days		
All U.S.	Omnivorous Leafroller Grape Leaffolder Orange Tortrix			- 1		
West of Rockies only	Saltmarsh Caterpillar Leafhoppers*			100		
CA only	Climbing Cutworm (Treat infestation and repeat at 7-14 day intervals as needed)	3				
	Grape Leaf Skeletonizer*	1 1/2 - 3				
	Thrips	1 1/2 - 3				
Horseradish (Ground	Do not apply more than 15 pints o Do not make more than 5 applicat * Leafhoppers & Grape Leaf Skele  Aphids Thrips	ions per crop.		48 hrs		
application Only)	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.					
Leafy Green Vegetables: Beet (tops) Dandelions, Kale,	Beet Armyworm Cabbage Looper* Diamondback Moth Imported Cabbageworm	1 1/2 - 3	10	48 hrs		
Mustard Greens, Greens, Parsley, Swiss Chard, Turnip Greens	Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.  * Do not use for Cabbage Loopers in AL & GA.					
Lemon CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Beet Armyworm	1 1/2 - 3	1	72 hrs		
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.					
Lentils	Western Yellowstriped Armyworm	1 1/2 - 3	21	48 hrs		
	Do not apply more than 3 pints of Do not make more than 2 applicat		YL 29LV per acre per crop.			

Lettuce	Alfalfa Looper	3/4 - 3	3/4-1 1/2 pt 7	48 hrs
(Head and Leaf varieties)	Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper	1 1/2 - 3	over 1 1/2 pts. – 10	
	Variegated Cutworm	1 1/2		
	Lettuce (head varieties)  Do not apply more than 24 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 15 applications per crop; minimum interval between treatments is 2 days.  Lettuce (leaf varieties)  Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop; minimum interval between treatments is 2 days.			
Melons Including: Canteloupe Casaba Santa Claus melon Crenshaw melon Honeydew melon Honey balls Persian melon Golden Pershaw melon Mango melon Pineapple melon Snake melon	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm	1 1/2 - 3	1 1/2 pts 1 day over 1 1/2 pts 3 days	48 hrs
	Variegated Cutworm	1 1/2		1 3
	Do not apply more than 18 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 12 applications per crop.			
Mint (Peppermint,	Variegated Cutworm Alfalfa Looper	3	14	48 hrs
Spearmint)	Flea Beetles	2 1/4 - 3		
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.			
Nectarine CA & AZ only	Thrips	1 1/2 – 3	1	72 hrs
1.0	Do not apply more than 9 pints o Do not make more than 3 applica	pints of ROTAM METHOMYL 29LV per acre per crop. applications per crop.		
Oats	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs

	Do not make more than 4 applic Chemigation: ROTAM METHOM chemigation. For best results, us 29LV. Apply in 0.1 to 0.2 inches more information.  *Cereal leaf beetle: ROTAM ME cereal leaf beetle eggs when ap be timed to correspond with the egg hatch to achieve maximum currently registered in California **Aphids: For aphid control, crop adverse environmental condition Applications on Russian wheat a (<10 adults per stem).	MYL 29LV may be applied see the highest listed rate of water per acre. See Control of water per acre. Use on the control of water per acre. See Control of	of ROTAM METHOMYL CHEMIGATION section for  vide contact ovicidal effect on directions. Application should d eggs or in anticipation of his pest stage (egg) is not  ng and not under stress from hiperatures or drought).	
Onions	Beet Armyworm	1 1/2 - 3**	7 - Green &	48 hrs
(Green & Dry Bulb)	Thrips* Variegated Cutworm Black Cutworm	3**	Dry Bulb Onions	
	Do not apply more than 18 pints Do not make more than 8 applic treatments is 5 days.  Onions, dry bulb  Do not apply more than 12 pints Do not make more than 8 applic treatments is 5 days.  *Chemigation: ROTAM METHOI chemigation to control thrips. Be thrips per plant. For best results, and a wetting agent. Apply in 0.1 CHEMIGATION section for more  ** Add a wetting agent to improve	of ROTAM METHOMYL ations per crop; minimur ations per crop; minimur MYL 29LV may be applications before to use the highest rate of 1 to 0.2 inches of water per information.	n interval between  29LV per acre per crop. In treatment interval between  ed by overhead sprinkler Ithrips populations reach 3-5 ROTAM METHOMYL 29LV	
	Add a wetting agent to improv	re coverage.		
Oranges CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Fruittree Leafroller Beet Armyworm Citrus Cutworm	re coverage.	1	72 hrs
CA, AZ & HI	Thrips Western Tussock Moth Orange Tortrix Fruittree Leafroller Beet Armyworm	1 1/2 - 3 of ROTAM METHOMYL	1 29LV per acre per crop.	72 hrs

	type insecticides registered for this use. Green Peach Aphid			
	Do not apply more than 18 pints Do not make more than 6 appli * Oriental Fruit Moth (Ground A	cations per crop.	1YL 29LV per acre per crop.	
Peanuts	Corn Earworm* Potato Leafhopper Fall Armyworm	3/4 – 3	21	48 hrs
	Beet Armyworm	1 1/4 - 3		
	Green Cloverworm Velvetbean Caterpillar Cabbage Looper Soybean Looper ** Thrips Granulate Cutworm	1 1/2 – 3		
	Do not apply more than 12 pints Do not make more than 8 applic Do not feed treated vines. * ROTAM METHOMYL 29LV ha **Soybean Looper is difficult to Use higher rate for severe infes	cations per crop. as ovicidal and larvicid control. Do not apply t		
Pears Northeast only	Green Fruitworm Oblique banded Leafroller	1 1/2 - 3*	7	48 hrs
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 2 applications per crop.  * Apply in a minimum of 50 gallons of water per acre.			
Peas (succulent) Including: Pigeon peas Chick peas Garbanzo beans Dwarf peas Garden peas Green peas English Peas Field peas Edible pod peas	Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar Variegated Cutworm	1 1/2 - 3	1 - Peas 5 - Forage 14 - Hay	48 hrs
	Alfalfa Caterpillar Armyworm Green Cloverworm	3/4 - 3		
	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop .  Do not make more than 6 applications per crop; minimum interval between treatments is 3 days.  * Do not use for Cabbage Loopers in AL & GA.			
Pecans Southeast only	Aphids	1 1/2 - 3	30	48 hrs
	Do not apply more than 21 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 7 applications per crop.			
Peppers Including: Bell Hot Pimentos	Loopers Beet Armyworm Green Peach Aphid Armyworm Fall Armyworm	1 1/2 – 3	3	48 hrs
Sweet	Variegated Cutworm	3/4 – 1 1/2		
	European Corn Borer	3		

Pomegranates	Omnivorous Leafroller	3	14	48 hrs
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 2 applications per crop.			
Potato	Tuberworm* Loopers Aphids Beet Armyworm Leafhoppers Fall Armyworm	1 1/2 - 3	6	48 hrs
	Variegated Cutworm Flea Beetles	1 1/2		
	Do not apply more than 15 pints of ROTAM METHOMYL2 9LV per acre per crop.  Do not make more than 10 applications per crop.  Chemigation - ROTAM METHOMYL 29LVmay be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  *Repeat applications of ROTAM METHOMYL 29LV on a 5-7 day schedule, or longer as needed, to control tuber worm populations. An application schedule of effective insecticides with different modes of action may be needed to keep foliar feeding larval populations as low as possible prior to harvest to reduce the risk of larval damage to the tubers. Failure to adequately control tuberworm larvae prior to crop senescence or vine kill increases the risk of tuber damage.			
Rye	Armyworms Cereal Leaf Beetle*Aphids**	3/4 – 1 1/2	7	48 hrs
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.  Chemigation - ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  *Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.  **Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought). Applications on Russian wheat aphid need to begin when aphid population is low (<10 adults per stem).			
Sorghum	Sorghum Webworm	1 1/2*	14**	48 hrs
Including: Sudangrass (except Sweet Sorghum)	Sorghum MidgeApply when 50% bloom and 3- days later if needed. Fall Armyworm (Budworm)	5 3/4 – 1 1/2*		

	Do not apply more than 3 pints of R Do not make more than 2 application  * Minimum of 10 gallons per acre by  ** Do not apply within 14 days of fe	ons per crop. y ground or 2 ga	allons per acre by air.	
Soybeans	Green Cloverworm Velvetbean Caterpillar Mexican Bean Beetle Corn Earworm - Light to moderate Infestations	2/5 - 3/4 (see Insect Predator section)	14 - Soybeans 3 - Forage 12 - Hay	48 hrs
	Corn Earworm -  Moderate to severe infestations	3/4 – 1 1/2		
	Soybean Aphid	1/2 – 1		
	Beet Armyworm Salt Marsh Caterpillar Bean Leaf Beetle Fall Armyworm Thrips Silver Spotted Skipper - Light to moderate infestations	3/4 – 1		
	Silver Spotted Skipper - Moderate to severe infestations	1 – 1 1/2		
	Do not apply more than 4.5 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 3 applications per crop.			
Spinach	Alfalfa Looper Cabbage Looper Beet Armyworm Fall Armyworm	1 1/2 - 3	7	48 hrs
	Variegated Cutworm 1 1/2  Do not apply when minimum daily temp. is 32° F, or lower.  Do not apply to seedlings less than 3" diameter.  Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.			
Sugar Beet	Beet Webworm Flea Beetles Carrion Beetles Beet Armyworm* Aphids* Western Yellowstripe Armyworm*	3/4 - 3	30 - Tops 21- Roots	48 hrs
	Variegated Cutworm	1 1/2	A CONTRACTOR OF THE CONTRACTOR	
	Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 10 applications per crop.  *Chemigation - ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation to control beet armyworm, aphids and western yellowstriped armyworm. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.			
Summer Squash* Including:	Looper Tobacco Budworm	1 1/2 - 3	1 1/2 pt 1 day over 1 1/2 pt 3 days	48 hrs

Wheat	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
	Do not apply more than 12 pints Do not make more than 4 applic Do not graze or feed.	cations per crop.		
Turf (For use on sod farms only)	Sod Webworm (after application, sprinkle irrigate for 15 minutes)	3 (1.1 fl. ozs. per 1000 sq. ft.)		48 hrs
Turf (For use on sod	Do not apply more than 21 pints Do not make more than 16 appl * For tomatillos do not apply mo acre per crop. Do not make more than 5 applic	ications per crop. re than 15 pints of R0		
	Pinworm Armyworm Fall Armyworm Variegated Cutworm	1 1/2		
Tomato (Including Tomatillos*)	Tomato Fruitworm Aphids Hornworm Loopers Beet Armyworm Southern Armyworm	1 1/2 - 3	1	48 hrs
	Fall Armyworm  Do not apply more than 7.5 pint  Do not make more than 5 applie	cations per crop.	MYL 29LV per acre per crop.	
- 1	Loopers Aphids Tobacco Budworm	1 1/2		
Tobacco (Except shade)	Flea Beetle Hornworm	3/4 - 1 1/2	5 - Flue cured 14 - Air or fire cured	48 hrs
	Do not apply more than 9 pints Do not make more than 4 applie		YL 29LV per acre per crop.	
Tangelo, Tangerine CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix, Beet Armyworm	1 1/2 - 3	1	72 hrs
Bitter melon Balsam pear Balsam apple Chinese Cucumber	of the fruit is edible cooked or	lications per crop. eae) family that are c raw, once picked can	onsumed when immature, 100%	
Hechima Chinese okra	Fall Armyworm			
Spaghetti squash Hyotan Cucuzza	Melon Aphid Melonworm Pickleworm			
Scallop squash Vegetable marrow	Flea Beetles Cucumber Beetles			
Crookneck squash Straightneck squash	Beet Armyworm Yellowstriped Armyworm Granulate Cutworm			

Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 4 applications per crop.

Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.

\*Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.

\*\*Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought). Applications on Russian wheat aphid need to begin when aphid population is low (<10 adults per stem).

# ger by Start of Start

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage: Store in a tightly closed container in a cool, dry place.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal (Nonrefillable container 5 gallons or less): Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container: Refill this container with Rotam Methomyl 29LV containing methomyl only. Do not reuse this container for any other purpose. Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Use standard industry practices for cleaning refillable containers.

Spills: For minor spills, leaks, etc., follow precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Rotam Agrochemical Company Limited or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Rotam Agrochemical Company Limited and Seller harmless for any claims relating to such factors.

Rotam Agrochemical Company Limited warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Rotam Agrochemical Company Limited, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW ROTAM LTD MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, Rotam Agrochemical Company Limited or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM AGROCHEMICAL COMPANY LIMITED AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ROTAM AGROCHEMICAL COMPANY LIMITED OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Rotam Agrochemical Company Limited and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Rotam Agrochemical Company Limited.

Manufactured by: 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826 Registered: [TBA]

# RESTRICTED USE PESTICIDE

Due to high Acute Toxicity to Humans

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

> GROUP 1A INSECTICIDE

# Rotam Methomyl 29LV Insecticide

Water Soluble Liquid

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient	By Weight
Methomyl	
(S-methyl-N-[(methylcarbamoyl)	
oxy]thioacetimidate)	29%
Inert Ingredients	71%
TOTAL	100%

EPA Reg. No. 83100-TBA

EPA Est. No.: TBA

Refer to inside label booklet for Directions for Use.

KEEP OUT OF REACH OF CHILDREN DANGER & POISON

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### FIRST AID

(N-Methyl Carbamate insecticide)

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING. FATAL IF SWALLOWED. CONTAINS METHANOL; MAY CAUSE BLINDNESS. CORROSIVE CAUSES IRREVERSIBLE EYE DAMAGE.

Do not get in eyes or on clothing. Wear protective eyewear. Harmful if inhaled or absorbed through skin. Avoid contact with skin or breathing spray mist. Wash hands thoroughly with soap and water after handling.

POISONING SYMPTOMS — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section on the ROTAM METHOMYL 29LV label and seek medical attention at once.

### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

TREATMENT — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

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### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent

### PHYSICAL AND CHEMICAL HAZARDS

systems that drain to surface water.

Combustible. Do not use or store near heat or open flame. Keep container closed.

surface waters with vegetated filter strips, and areas over-laying tile drainage

Oxplosive propurtus when breated to elevated toursparatures.

# STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage: Store in a tightly closed container in a cool, dry place.

Pesticula wastes are acutely haranged.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

### Registered:

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

# Net Contents Gallons



### Electronic versions of the labels for 83100-ET, 83100-EI and 81598-O

Frank Sobotka o Thomas Harris

03/09/2011 10:43 AM

See Attached documents per our phone conversation.

Dr. Frank E. Sobotka, Senior Partner IPM Resources LLC 4032 Crockers Lake Blvd. Suite 818 Sarasota, FL 34238

PH: 215 497-9501 FX: 215 497-9502







083100-000ET.20110308.29LV Primary.pdf 083100-000EI.20110308.90SP Primary.pdf 081598-0000.20110308.Tech Primary.pdf

# Memorandum

m Jon Sulmissin!

Date: 01 / 13 / 11

To: PM:07, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.

If you have any questions about this process, please contact Teresa Downs (305-5363).

This is a: 

✓ fully accepted submission

☐ partially accepted submission

☐ rejected submission

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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

January 13, 2011

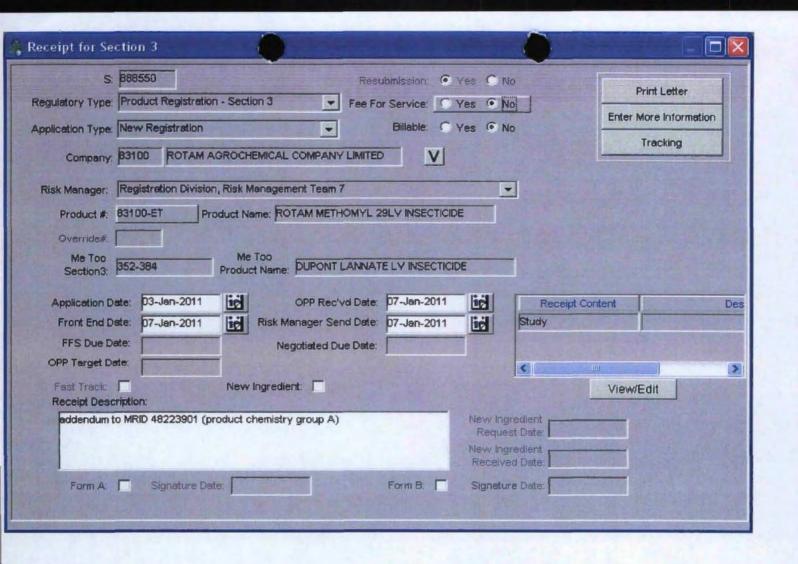
OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

FRANK E. SOBOTKA, PH.D.
IPM RESOURCES LLC
ROTAM AGROCHEMICAL COMPANY LIMITED
7/F CHEUNG TAT CENTRE
4032 CROCKERS LAKE BLVD., STE 818
SARASOTA, FL 43238-

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 07-JAN-11. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.



483437-00

# IPM Resources LLC

4032 Crockers Lake Blvd., Suite 818, Sarasofa, FL 34238 Phone: (215) 497-9501 Fax: (215) 497-9502

"an intellectual property management resource company"

January 03, 2011

VIA UPS EXPRESS

hebert.john@epa.gov [REF. **2** 1 -703-308-6249]

Document Processing Desk (REGFEE)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501
ATTN: John Hebert PM 7

10 nore superseded by data submitted 3/10/11

SUBJECT:

Application for Registration - Rotam Methomyl 29LV Insecticide

Submission of Addendum to Volume 1-R (ADDENDUM I)

EPA File Symbol 83100 - ET

Dear Mr. Hebert:

The purpose of this letter is to transmit to the Agency on behalf of Rotam Agrochemical Company Limited an Addendum (ADDENDUM I) to MRID 48223901 (Volume 1-R/Product Chemistry Group A) for the above subject Product Submission in review. Rotam is requesting that a new MRID number be issued for this report, and, the report addended to MRID 48223901 for review.

Addendum I adds a second Confidential Statemet of Formula (Alternative CSF) with supporting information on the Products Identity and Disclosure of Ingredients, including Manufacturing Process, for an Alternative Formulation containing a colorant. The specified Colorant (inert dye) is a Food Grade Colorant approved for direct application and packaging of food products.

The addition of a colorant incorporates better stewarship of the product by alowing the end-user to identify the presence of the product in the tank when mixing and applying the product.

Rotam trusts that the Agency will give this use special consideration when evaluating the products "significant similarity" in composition with respect to FIFRA Section 3(c)(2)(b)(i). The following documents are enclosed with this submission:

Administrative Materials: (MRID No.:

- Transmittal Form (EPA Form 8570-1)
- Confidential Statement of Formula (EPA Form 8570-4), 2 Copies

John Hebert, PM 7 EPA Registrations Branch January 03, 2011

SUBJECT: Application for Registration - Rotam Methomyl 29LV Insecticide/Continued EPA File Symbol 83100 - ET

Three copies each of the following:

VOLUME NO.	DESCRIPTION	OPPTS GUIDELINE REF. NO.	MRID NO.
1-R ADDENDUM I	Product Identity & Disclosure of Ingredients, Including Manufacturing Process/Rotam Methomyl 90SP Insecticide [Report No.: METHMYL 29LV]	Group A 830.1550 830.1600 830.1650	48343701

We appreciate your assistance with this Application. If you have any questions or need additional information, please do not hesitate to contact us at any time.

Sincerely yours,

Senior Partner

IPM Resources LLC (Agent)

ATT:

<b>\$EPA</b>	Environmental	ited States  Protection Aggron, DC 20460	ency	Registra Amend		OPP Identifier Number
	-	application for	Pesticide - Sect			
1. Company/Product Number		120400	2. EPA Product Mana	ager	3. P	roposed Classification
4. Company/Product (Name	emical Company Ltd	7 83 100	John Hebert		- 1	None Restricted
Rotam Methomyl 29L\		ET)	7			
5. Name and Address of Ap ROTAM Agrochemical Comp C/O IPM Resources LLC (Ad 4032 Crockers Lake Blvd., S Sarasota, FL 34238	pany Limited gent)	(e)	(b)(i), my product is to: EPA Reg. No		tical in c	h FIFRA Section 3(c)(3) omposition and labeling
Check if this	s is a new address		Product Name	Duront Cannat	erv	al gas i au
		Se	ction - II			
Resubmission in res	ponse to Agency letter d	lated	Final printed Agency lette "Me Too" A  Other - Expl	pplication.	e to	
1. Material This Product Wi	II Re Packaged In:	Sec	ction - III			
Child-Resistant Packaging	Unit Packaging	Wate	r Soluble Packaging	2. Type of	Containe	r
Yes ✓ No	✓ Yes No	<b>4</b>	Yes No	7	Metal Plastic Glass	
* Certification must be submitted	If "Yes" Unit Packaging wgt.	No. per container lif "Ye Pecke	es" No. per age wgt container		Paper Other (	Specify)
3. Location of Net Contents	Information 4	I. Size(s) Reteil Contr 1qt, 1 gal, 2.5	siner gal, 15 gal, bulk	5. Location of La	bel Directi	ons
<ol><li>Manner in Which Label is Printed or</li></ol>		Lithograph Paper glued Stenciled	Other		-	
			tion - IV			1313
1. Contact Point (Complete	items directly below for	identification of indi	vidual to be contacted, i	f necessary, to p	rocess this	s application.)
<sub>lame</sub> Frank E. Sobotka, Ph.I	D.	Title Agent				ne Ne. (Include Area Code) 17-9501
	ments I have mede on the knowlingly false or m			e or imprisonmer		6. Data Application Received (Stamped)
2. Signature	19/01	3. Title Agent				•••••
Frank E. Sobotka, Ph.D	N	5. Date	January 03, 20	11		•

# 21-Day Screen Completed by Contractor

21-Day Expires on 10-5-10

Jacket # 83100 - ET MRID# 482239

Content Screen: Recommended to Pass/Fail

86-5 Review: Passed/Failed/NA

Transfer This Jacket to:

STEPHEN SCHAIBLE

PM-7

# Completion of 21-Day Content Screen

PM- 7

EPA Reg. #(File Symbol) 83/00 - ET

Decision # D\_\_\_\_\_

Data package delivered to you on \_\_\_\_\_\_\_. (date)

Jacket/Mini-jacket will be transferred to you today. (Pick up from Document Center)

Thank you,

Registration Division's 21-Day Content Team

# To the Document Center (ITRMD)

\*Please transfer jacket/mini-jacket to the Product Manager Team circled below:

Minor Use Section: PM -5

Insecticide Branch: PM -10 PM-13

Herbicide Branch: PM-23 PM-25

Fungicide Branch: PM-20 PM-21 PM-22

Insect/Rodent Branch: PM-1 PM-7

\*Reminder to PM – If applicable, pick-up data from the Screening Room.

Processed by RD's Completeness Check Team

(Team Member Signature) (Date)

83100 ET

# Memorandum

Date:	09 / 28 / 10	
То:	PM: 07	, Regulatory Manage
From:	Information Servi	ces Branch, ITRMD
mulcan	our receipt of this date on that MRIDs for the osted to OPPIN.	ta submission is not an the enclosed studies have
TY OHI CH	e expect that it will te above date befor le in OPPIN.	be approximately 5 days te the study-level data is
If you	ou have any questio ontact Teresa Down	ns about this process, s (305-5363).
This is a	fully accepte	ed submission

☐ partially accepted submission

☐ rejected submission



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

September 28, 2010

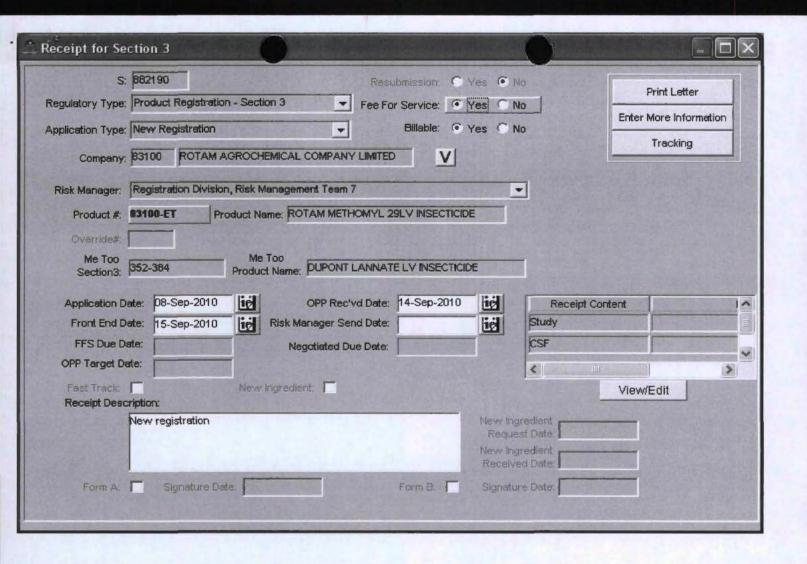
OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

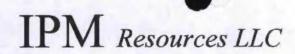
IPM RESOURCES LLC
ROTAM AGROCHEMICAL COMPANY LIMITED
7/F CHEUNG TAT CENTRE
4032 CROCKERS LAKE BLVD., STE 818
SARASOTA, FL 43238-

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 14-SEP-10. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.





482239-00

4032 Crockers Lake Blvd., Suite 818, Sarasota, FL 34238 Phone: (215) 497-9501 Fax: (215) 497-9502

"an intellectual property management resource company"

September 10, 2010

VIA UPS EXPRESS

hebert.john@epa.gov [REF. = 1 -703-308-6249]

Document Processing Desk (REGFEE)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501
ATTN: John Hebert PM 7

SUBJECT: Application for Registration - Rotam Methomyl 29LV Insecticide

EPA File Symbol 83100 -

Dear Mr. Hebert:

The purpose of this letter is to transmit to the Agency on behalf of ROTAM AGROCHEMICAL COMPANY LTD. a "Me Too" application to register Rotam Methomyl 29LV Insecticide. This product is similar or identical in composition and labeling to DuPont Lannate LV (EPA Reg. No. 352-384).

All data to support this registration are included in this submission, or cited using cite-all method of data support, except for two Group B Physical/Chemical Property studies, Storage Stability and Corrosion Characteristics. These two studies will be conducted and a report sent to the Agency upon completetion.

This End Use Product will be formulated using Rotam Methomyl Technical. A Formulator's Exemption Statement has been included in this submission. Please note that an application to support registration of Rotam Methomyl Technical was submitted to the Agency approximately one week earlier.

John Hebert, PM 7 EPA Registrations Branch September 10, 2010

# SUBJECT: Application for Registration - Rotam Methomyl 29LV Insecticide/ Continued EPA File Symbol 83100 - To be Added

	1	he	foll	lowing	are	enc	losed	m	this	submission:
--	---	----	------	--------	-----	-----	-------	---	------	-------------

Administrative Materials: (MRID No.:

- Transmittal Form (EPA Form 8570-1)
- PRIA Prepay Receipt
- Certification With Respect to Citation of Data (EPA Form 8570-34)
- Data Matrix (EPA Form 8570-35) w/Redacted version
- Formulator's Exemption Statement (EPA Form 8570-27)
- Confidential Statement of Formula (EPA Form 8570-4), 2 Extra Copies
- Draft Labeling Rotam Methomyl 29LV Insecticide, 5 Copies
- Three copies each of the following:

VOLUME NO.	DESCRIPTION	OPPTS GUIDELINE REF. NO.	MRID NO.
1-R	Product Identity & Disclosure of Ingredients, Including Manufacturing Process & Discussion of Formation of Impurities/Rotam Methomyl 29LV Insecticide [Report No.: METHMYL 29LV]	Group A 830.1550 830.1600 830.1650 830.1670	48223901
2	VOLUME 2 NOT SUBMITTED		AL.M.
3	Enforcement Analytical Method (Active Ingredient Content)/ Rotam Methomyl 29LV Insecticide[Report No.:RA714201]	830.1800	48223902

John Hebert, PM 7 EPA Registrations Branch September 10, 2010

# SUBJECT: Application for Registration - Rotam Methomyl 29LV Insecticide/ Continued EPA File Symbol 83100 - To be Added

4	Determination of Physical and Chemical Properties of Rotam Methomyl 29LV Insecticide [Report No.: RA7142(02-15)]	Group B 830.6302 830.6303 830.6304 830.6313 830.6314 830.6315 830.6316 830.6318 830.7000 830.7050 830.xxxx 830.xxxx 830.xxxx	48223903
5	THIS VOLUME 5 NOT SUBMITTED		
6	Acute Toxicology Studies Rotam Methomyl 29LV Insecticide [Report No.: 22668 to 22673]	870.1100 870.1200 870.1300 870.2400 870.2500 870.2600	48223904

We appreciate your assistance with this Application. If you have any questions or need additional information, please do not hesitate to contact us at any time.

Sincerely yours,

Hrank E. Sobotka, Ph. Senior Partner

IPM Resources LLC (Agent)

ATT:

# NEW APPLICATIONS

DAIE: 9/15/10
FILE NUMBER: 83/00-ET
FEP (OPPIN ENTRY) pum 9/15/10
(Initial & date)
FILE ROOM:
(Initial & date)
SIG:
(Initial & date)
FILE ROOM:
(Initial & date)
X ASSIGN TO PM 7 (NO DATA)
JACKET TO SHELF (DATA)

# PRIA 2 – 21 Day Content Screen Review Worksheet (EPA/OPP Use Only)

21 Day Screen Start Date: 9-14-10 3/23/09

Experts In-Processing Signature: B. 2 Date 9-16-10 Fee Paid: Yes Division management contacted on issues No Yes Date

	Items for Review	31/		Yes	No	N/A*
1	Application Form (EPA Form 8570-1)(link to form) signed & co including package type		×			
2	Confidential Statement of Formula all boxes completed, form stated (EPA Form 8570-4) (Link to form)	igned, a	nd	X		
2	<ul> <li>a) All inerts (link to http://www.epa.gov/opprd001/inerts/), including fragrances, approved for the proposed uses (see Footnote A)</li> </ul>					
3	Certification with Respect to Citation of Data (EPA Form 8570 form) completed and signed (N/A if 100% repack)	)-34) (Li	nk to	X		
	Certificate and data matrix consistent			X		
	If applicant is relying on data that are compensable, is the offer to pay statement included. (see Footnote B)	yes	no			
	If applicable, is there a letter of Authorization for exclusive use or					
4	Formulator's Exemption Statement (EPA Form 8570-27) (Link completed and signed (N/A if source is unregistered or applicant dechnical)			X		
	Data Matrix (EPA Form 8570-35) (Link to form) both internal arcopies (PR 98-5) (Link to PR 98-5) completed and signed (N/A if repack)		nal	X		
5	a) Selective Method (Fee category experts use)	yes	no			
	b) Cite-All (Fee category experts use)				the graph	
	c) Applicant owns all data (Fee category experts use)					
6	5 Copies of Label (link to <a href="http://www.epa.gov/oppfead1/labelia">http://www.epa.gov/oppfead1/labelia</a> (Electronic labels on CD are encouraged and guidance is available). http://www.epa.gov/pesticides/regulating/registering/submissions/index.	lable)( l	ink to	X		

1

7	Is the data package consistent with PR Notice 86-5 (link to PRN 86-5)	X	
8	Notice of Filing (link to <a href="http://www.epa.gov/pesticides/regulating/tolerance_petitions.htm">http://www.epa.gov/pesticides/regulating/tolerance_petitions.htm</a> ) included with petitions (link to <a href="http://www.epa.gov/pesticides/regulating/tolerances.htm">http://www.epa.gov/pesticides/regulating/tolerances.htm</a> )		*
9	If applicable for conventional applications, reduced risk rationale (link to http://www.epa.gov/opprd001/workplan/reducedrisk.html)		×
10	Required Data (link to <a href="http://www.epa.gov/pesticides/regulating/data_requirements.htm">http://www.epa.gov/pesticides/regulating/data_requirements.htm</a> ) and/or data waivers. See Footnote C.  a) List study (or studies) not included with application		

### Comments:

- Therts approved for food we under 40 CFR 180.920, pre hanvit app.
  - According to the registrant, quiaurner: 830.6315, 6316,6319,6320,6321,7100 were not submitted because they don't apply to the product properties of this product. (see data matrix footnotes) Guideline 830.1700 was not submitted.

Efficacy aata was not submitted.

Contacked registrant on 09/20 for the following deficiencies:

· certification form: should be selective method, not cite-all

· formulators and esf: the source negistration number is incomplete. According to the registrant, this reg # was submitted a week earlier, refer to the work letter for his explanation.

Registrant ent certification form on: 09/21/10

studies passed 86-5 Review.

Jacket Failed: left for the PM to duide if the quiduines submitted are sufficient to support this product.

JB 09/28

MRID: 482261

\* N/A - Not Applicable

### Footnotes

A. During the 21 day initial content review, all CSFs will be reviewed to determine whether all inerts listed, including fragrances, are approved for the proposed uses. If an unapproved inert is identified, the applicant must either 1) resolve the inert issue by, for example, removing the inert, substituting it with an approved inert, submitting documentation that EPA approved the inert for the proposed pesticidal uses, correcting mistakes on the CSF, etc. or 2) provide the data to support OPP approval of the inert or 3) withdraw the application. Removing or substituting an inert ingredient will require a new CSF and may require submission of data. All information, forms, data and documentation resolving the inert issue must have been received by the Agency or the application withdrawn within the 21 day period, otherwise, the Agency will reject the application as described below.

To successfully complete this aspect of the 21 day initial content screen, applicants are strongly encouraged to verify that all inert ingredients have been approved for the application's uses even if a product is currently registered by consulting the inert Webs site [link to http://www.epa.gov/opprd001/inerts/lists.html] and if the inert is not approved, to obtain the necessary inert approval prior to submitting an application to register a pesticide product containing that inert ingredient. Some inert ingredients are no longer approved for food uses or certain types of uses. The name and/or CAS number on a CSF must match the name and CAS number on this web site. Simple typographical errors in the name or CAS number have resulted in processing delays.

If an inert is not listed on the inert ingredient web site and the applicant believes that the inert has been approved, the applicant should contact the Inert Ingredient Assessment Branch (IIAB) at inertsbranch@epa.gov and resolve the issue. Copies of the correspondence with IIAB resolving the issue should accompany the application. All new inerts except PIP inerts are reviewed by IIAB. The IIAB should also be contacted for any questions on what supporting data needs to be submitted for and the Agency's inert review process. Questions on PIP inerts should be directed to the Chief of Microbial Pesticides Branch [Link to

http://www.epa.gov/oppbppd1/biopesticides/contacts\_bppd.htm].

When a brand, trade, or proprietary name of an inert ingredient is listed on a CSF, additional information such as an alternate name of the inert, CAS number or other information [link to http://www.epa.gov/opprd001/inerts/tips.pdf] must also be included to enable the Agency to determine if it has been approved. Each component of an inert mixture (including a fragrance) must be identified. In some cases, the supplier of the mixture or fragrance may need to provide this information to the Agency. Prior to the Agency's receipt of an application, applicants must arrange with a proprietary mixture or fragrance supplier to provide the component information to the Agency or promptly upon EPA's request. If the inert ingredients in a proprietary blend (including fragrances) cannot or are not identified or provided within the 21-day content review period, the Agency will reject the application.

During the 21 day content review, applicants should submit information to the individual identified by the Agency when the applicant is informed of an unapproved inert.

# **Unapproved Inerts Identified on CSFs**

All applications except conventional new products and PIPs

Once an unapproved inert is identified on a CSF, the Agency will contact the applicant with the following options:

- 1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or
- 2. Submit the information and data needed for the Agency to approve the unapproved inert. If this option is selected and implemented, the Agency may request an extension in the PRIA decision review timeframe to accommodate the inert review/approval process;

3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of these options is selected and implemented by the applicant within the 21 day content review period, the Agency will reject the application and retain 25% of the full fee of the category identified.

# Conventional New Product Applications

When the Registration Division identifies an unapproved inert on a CSF with an application for a new product that the applicant has not identified as requiring an inert approval (R311, R312 or R313), it will contact the applicant with the following options:

- Correct the application by, for instance, correcting the inert's identity or CAS
  number, providing documentation that the inert has been approved, or
  removing the unapproved inert from the CSF or replacing it with one that is
  approved for the application's uses; or
- 2. Submit the information and data needed for the Agency to approve the unapproved inert, including any required petition to establish or amend a tolerance or exemption from a tolerance. (This option may change the PRIA category for the application, which could require a longer decision review time and a larger fee. If additional fees are due, they must be received by the Agency within the 21 day content review period.)
- 3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21-day content-review period, the Agency will reject the application and retain 25% of the appropriate fee for the new product-inert approval category.

# PIP Applications

When the Biopesticide and Pollution Prevention Division identifies an unapproved inert on a PIP CSF and a request to approve the inert does not accompany the application, it will contact the applicant with the following options:

- Correct the application by, for instance, correcting the spelling or name of the inert to that in 40 CFR 174, or providing documentation that the inert has been approved; or
- 2. Submit the information and data needed for the Agency to approve the unapproved inert. If an inert ingredient tolerance exemption petition is required, the petition must be received by the Agency and the B903 fee paid within the 21 day period. If this option is selected and implemented, the Agency will discuss harmonizing the timeframe for both actions.

3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21 day content review period, the Agency will reject the application and retain 25% of the fee.

- B. A policy on documentation of offers to pay is still being developed, however, for a me-too or fast track (similar/identical) new product, R300 or A530, an application without the necessary authorizations of offers to pay will be placed into either R301 or A531. The Agency recommends that authorizations of offers to pay be submitted with other PRIA applications to avoid delays in the Agency's decision.
- C. Biopesticide applicants are advised to contact the Agency and discuss study waivers prior to submitting their application to the Agency. Documentation of such discussions should be submitted with the study waiver.

# Script for Rejection Phone cal

Contact Name: Frank Sobotka Phone #: 215-497-9501

	Email:
	First Call/Initials: Second Call/Initials:
	Date: 09/20/10 Date:
	Time: 12:00 Time:
	This is, EPA contractor.
	I'm calling regarding your submission in support of
7	83100-ET Potam Methomal 2917 Insecticle
	We have found the following deficiencies regarding:
	PR Notice 86.5: Yes or No 182261 / masked
	Volume/Study Title: 48 2239
	(A) 402: VI(pg 6,60)
	I'm calling regarding your submission in support of  83100-E1 Rotam Methomyl 908P Insecticide.  83100-ET Rotam Methomyl 29LV Insecticide.  We have found the following deficiencies regarding:  PR Notice 86.5: Yes or No  Volume/Study Title:
	Volume/Study Title:
	Additional volumes continued on back of page: Yes or No
	Application Package: Yes or No
70-EI	(* cectification - D section I should be selective method
+ 100-6T	* Certification - Desection I should be selective method  * formulation - Desection - Desection I should be selective method  * formulation - Desection -
	These deficiencies have been approved by EPA.
	The corrections can be faxed to 703-305-5060/Attn:
	Second Call/Email:
	If we do not receive the corrections by, we will process
	your submission, accordingly. Please direct all future calls and



### FW: Revised Rotam Methomyl 29LV/90SP 8570-34 Form

Frank Sobotka o brandon.jennifer

09/21/2010 10:14 AM

History:

This message has been replied to.

Resending, wrong spelling of your name. This one should get to you.

Dr. Frank E. Sobotka, Senior Partner IPM Resources LLC 4032 Crockers Lake Blvd. Suite 818 Sarasota, FL 34238

PH: 215 497-9501 FX: 215 497-9502

\*Personal privacy information\*

From:

To: brandon.gennifer@epa.gov

Subject: Revised Rotam Methomyl 29LV/90SP 8570-34 Form

Date: Tue, 21 Sep 2010 10:05:40 -0400

See attached revised 8570-34 Form for Both Subject Products. Thanks for your assistance.

Dr. Frank E. Sobotka, Senior Partner IPM Resources LLC 4032 Crockers Lake Blvd. Suite 818 Sarasota, FL 34238

PH: 215 497-9501 FX: 215 497-9502





Rotam Methomyl 29LV 8570-34 form 09\_08\_10 rev.pdf Rotam Methomyl 90SP 8570-34 form 09\_08\_10 rev.pdf



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

September 15, 2010

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

OPP Decision Number: D-439801

EPA File Symbol or Registration Number: 83100-ET

Product Name: ROTAM METHOMYL 29LV INSECTICIDE

EPA Receipt Date: 14-Sep-2010 EPA Company Number: 83100

Company Name: ROTAM AGROCHEMICAL COMPANY LIMITED

FRANK E. SOBOTKA, PH.D.
IPM RESOURCES LLC
ROTAM AGROCHEMICAL COMPANY LIMITED
7/F CHEUNG TAT CENTRE
4032 CROCKERS LAKE BLVD., STE 818
SARASOTA, FL 43238-

SUBJECT: Receipt of Registration Application Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your application and certification of payment. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R310

NEW PRODUCT; NON-FAST TRACK (INCLUDES REVIEWS OF PRODUCT CHEMISTRY; ACUTE TOXICITY; PUBLIC HEALTH PEST EFFICACY);

No additional payment is due at this time.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 308-9362.

Sincerely

Front End Processing Staff

Information Technology & Resources Management Division

### Fee for Service

{882190#~

This package in	ncludes the following
New Reg	istration
○ Amendm	
✓ Studies?	□ Fee Waiver?
□volpay %	Reduction:
Danaint No	0

OAD	
BPPD	
• RD	

Receipt No. S- 882190

EPA File Symbol/Reg. No. 83100-ET

Pin-Punch Date: 9/14/2010

This item is NOT subject to FFS action.

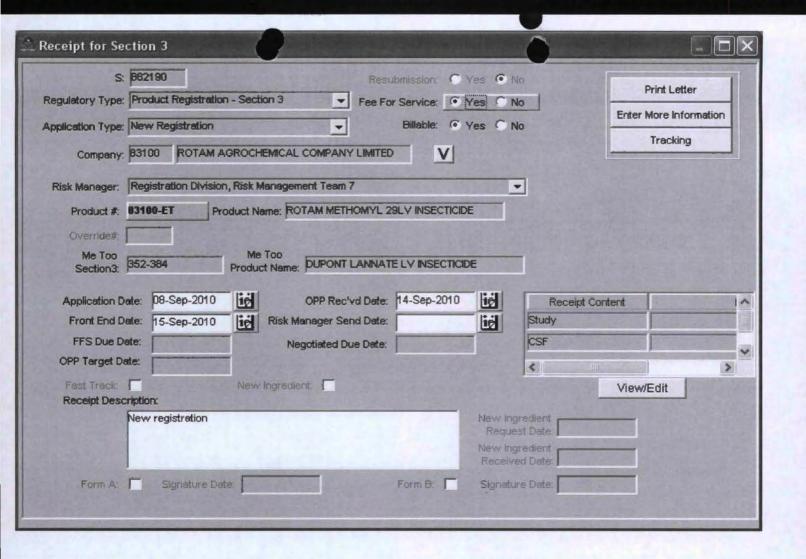
# Action Code: Requested: R-310 Granted: R-310

Amount Due: \$ 4578.00

Parent/Child Decisions:

Inert Cleared for Interlued Ose	Uncleared Inert in Produc
Reviewer: Very Guell	Date: 9 15 10
Remarks:	1 1
Formulator's exemption	in form in complete.

290



## FEE FOR SERVICE

### Pay. Gov Payment Confirmation

From: paygovadmin@mail.doc.twai.gov

Sent: Fri 9/10/10 9:23 AM

To:

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.

Your transaction has been successfully completed.

Transaction Summary

Application Name: PRIA Service Fees

Pay.gov Tracking ID: 251ERU90 Agency Tracking ID: 74137336097

Name On Account: IPM Resources LLC

Transaction Type: ACH Debit Transaction Amount: \$4,578.00 Payment Date: Sep 13, 2010

Account Type: Business Checking

Routing Number: 031000503

Account Number: \*\*\*\*\*\*\*\*\*9541

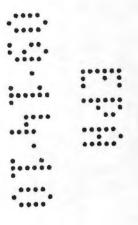
Transaction Date: Sep 10, 2010 9:23:08 AM

Number of Payments Scheduled: 1

Frequency: OneTime Decision Number: Registration Number:

Company Name: Rotam Agrochemical Compan

Company Number: 83100 Action Code: R3100 \*Personal privacy information\*





4032 Crockers Lake Blvd., Suite 818, Sarasota, FL 34238 Phone: (215) 497-9501 Fax: (215) 497-9502

"an intellectual property management resource company"

September 10, 2010

VIA UPS EXPRESS

hebert.john@epa.gov [REF. **=** 1 -703-308-6249]

Document Processing Desk (REGFEE)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501
ATTN: John Hebert PM 7

SUBJECT: Application for Registration - Rotam Methomyl 29LV Insecticide

EPA File Symbol 83100 -

Dear Mr. Hebert:

The purpose of this letter is to transmit to the Agency on behalf of ROTAM AGROCHEMICAL COMPANY LTD. a "Me Too" application to register Rotam Methomyl 29LV Insecticide. This product is similar or identical in composition and labeling to DuPont Lannate LV (EPA Reg. No. 352-384).

All data to support this registration are included in this submission, or cited using cite-all method of data support, except for two Group B Physical/Chemical Property studies, Storage Stability and Corrosion Characteristics. These two studies will be conducted and a report sent to the Agency upon completetion.

This End Use Product will be formulated using Rotam Methomyl Technical. A Formulator's Exemption Statement has been included in this submission. Please note that an application to support registration of Rotam Methomyl Technical was submitted to the Agency approximately one week earlier.

John Hebert, PM 7 EPA Registrations Branch September 10, 2010

### SUBJECT: Application for Registration - Rotam Methomyl 29LV Insecticide/ Continued EPA File Symbol 83100 - To be Added

The foll	lowing are	enclosed	in th	is submissio	n:
----------	------------	----------	-------	--------------	----

Administrative Materials: (MRID No.:

- Transmittal Form (EPA Form 8570-1)
- PRIA Prepay Receipt
- Certification With Respect to Citation of Data (EPA Form 8570-34)
- Data Matrix (EPA Form 8570-35) w/Redacted version
- Formulator's Exemption Statement (EPA Form 8570-27)
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- Draft Labeling Rotam Methomyl 29LV Insecticide, 5 Copies
- Three copies each of the following:

VOLUME NO.	DESCRIPTION	OPPTS GUIDELINE REF. NO.	MRID NO.
1-R	Product Identity & Disclosure of Ingredients, Including Manufacturing Process & Discussion of Formation of Impurities/Rotam Methomyl 29LV Insecticide [Report No.: METHMYL 29LV]	Group A 830.1550 830.1600 830.1650 830.1670	
2	VOLUME 2 NOT SUBMITTED		6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
3	Enforcement Analytical Method (Active Ingredient Content)/ Rotam Methomyl 29LV Insecticide[Report No.:RA714201]	830.1800	6 C C C C C C C C C C C C C C C C C C C

John Hebert, PM 7 EPA Registrations Branch September 10, 2010

### SUBJECT: Application for Registration - Rotam Methomyl 29LV Insecticide/ Continued EPA File Symbol 83100 - To be Added

4	Determination of Physical and Chemical Properties of Rotam Methomyl 29LV Insecticide [Report No.: RA7142(02-15)]	Group B 830.6302 830.6303 830.6304 830.6313 830.6314 830.6315 830.6316 830.6318 830.7000 830.7050 830.xxxx 830.xxxx 830.xxxx
5	THIS VOLUME 5 NOT SUBMITTED	
6	Acute Toxicology Studies Rotam Methomyl 29LV Insecticide [Report No.: 22668 to 22673]	870.1100 870.1200 870.1300 870.2400 870.2500 870.2600

We appreciate your assistance with this Application. If you have any questions or need additional information, please do not hesitate to contact us at any time.

Sincerely yours,

Hrank E. Sobotka, Ph. D

Senior Partner
IPM Resources LLC (Agent)

ATT:

<b>\$EPA</b>	United State Environmental Protec Washington, DC	tion Agency	1	Registra Amend Other		OPP Identifier Number
	Applica	tion for Pesticide - Se	ection	1		
Company/Product Number     Rotam Agroche	emical Company Ltd / 83100	2. EPA Product N John Hebert	Aanager		3. P	Proposed Classification
4. Company/Product (Name Rotam Methomyl 29L\		PM# 7				THORE THE MENT OF THE PARTY OF
5. Name and Address of Ap ROTAM Agrochemical Comp C/O IPM Resources LLC (Ag 4032 Crockers Lake Blvd., S Sarasota, FL 34238	pany Limited gent)	101 000 0000000000000000000000000000000	352 DuP		tical in c	h FIFRA Section 3(c)(3) omposition and labeling
		Section - II				
Notification - Explain  Explanation: Use addition Submission of request for New "me-too" End-use For Chemistry/Acute Tox. See	nel page(s) if necessary. (For sec r Registration and Service Fee ( Registration Application (EPA PR ervice Fee: \$4,578. Product: F mpany Limited, c/o IPM Resource Ph: 215 497-9501 FAX: 21	Other - I  Tion I and Section II.)  PRIA-2003) verification. RIA No.: R310) Formulator's Elector Methomyl 29LV Insections LLC (Agent), 4032 Crocke	cide (EP	elow. on, Non-fast A Reg. No.:	83100- 1 818, Sar	To be Added). Contact: rasota, FL 34238 Email:
		Section - III				
1. Material This Product Wi				T		
Child-Resistant Packaging Yes No	Unit Packaging  Yes  ✓ No	Water Soluble Packaging  Yes  No		2. Type of	Metal Plastic Glass	
* Certification must be submitted	If "Yes" No. per Unit Packaging wgt. containe	If "Yes" No. po Package wgt contain			Paper Other (	(Specify)
	Information 4. Size(s) I	Retail Container	5. Lo	cation of La	bel Directi	ions
1.1	Container 1 qt,	1 gal, 2.5 gal, 15 gal , bulk				
✓ Label	f 1	ograph On er glued noiled	ther			
Label C	f 1		ther			
6. Manner in Which Lebel is Printed or	f 1	ograph er glued noiled  Section - IV		essary, to p	ocess thi	
6. Manner in Which Lebel is Printed or	Affixed to Product glued Lith Pap Ste	ograph er glued noiled  Section - IV		essary, to p	Telephor	
6. Manner in Which Lebel is Printed or  1. Contact Point (Complete Name Frank E. Sobotka, Ph. I	Affixed to Product glued Lith Pap Ste items directly below for identification.  Certification and the paper of the paper o	Section - IV  Title Agent  Cation  and all attachments thereto are to	ed, if nec	arate and co	Telephor 215 49	is application.) ne No. (Ibclude Area Code)
6. Manner in Which Lebel is Printed or  1. Contact Point (Complete Name Frank E. Sobotka, Ph.I. I certify that the state I scknowledge that an	Affixed to Product glued Pap Ste  items directly below for identification  Certification  when the paper of t	Section - IV  Title Agent  Cation  and all attachments thereto are to	ed, if nec	arate and co	Telephor 215 49	ne No. (Include Area Code) 07-9501 6. Bate emplication Received



United States

### **Environmental Protection Agency**

Washington, DC 20460

### Formulator's Exemption Statement (40 CFR 152.85)

Applicant's Name and Address

ROTAM AGROCHEMICAL COMPANY LIMITED

C/O IPM Resources LLC

4032 Crockers Lake Blvd.

Suite 818

Sarasota, FL 34238

EPA File Symbol/Registration Number

83100 - To be Added

Product Name

Rotam Methomyl 29LV Insecticide

Date of Confidential Statement of Formula (EPA Form 8570-4)

November 10, 2009

As an authorized representative of the applicant for registration of the product identified above, I certify that:

- (1) This product contains the following active ingredient(s): METHOMYL
- (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.
- (3) Indicate by checking (A) or (B) below which paragraph applies:
- (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).
- OR

  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.

Source

(4) The following active ingredients in this product qualify for the formulator's exemption.

Active Ingredient	Product Name	Registration Number
METHOMYL		
*Product ingredie	ent source information may be entitled	d to confidential treatment*
		•••••
		··
		• • • • • • • • • • • • • • • • • • • •
Signature	Name and Title	Date / / .***
1/1/2 Poller	Frank E. Sobotka, Ph.D. (Agent)	11/10/09

EPA Form 8570-27 (Reg. 8-95)

White - EPA copy Yellow - Aggilloant copy



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

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Certification with Respec	t to Citation	of Data
Applicant's/Registrant's Name. Address. and Telephone Number Rotam Agrochemical Company Ltd., pio IPM Resources LLC (Agent), 660 Newtown-Yardley Rd., Ste 105 Newtown, PA. 18940	215 497-9501	EPA Registration Number/File Symbol 83100 - TBA
Active Ingredient(s) and/or representative test compound(s) METHOMYL		September 08, 2010
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158 TERRESTRIAL FOOD CROP	3)	Product Name ROTAM METHOMYL 29LV INSECTICIDE
NOTE: If your product is a 100% repackaging of another purchased EPA-register submit this form. You must submit the Formulator's Exemption Statement (EPA Formulator's Exemption Statement (EPA Formulator).		ed for all the same uses on your label, you do not need to
I am responding to a Data-Call-In Notice, and have included with this form a be used for this purpose).	list of companie	es sent offers of compensation (the Data Matrix form should
SECTION I: METHOD OF DATA SUP	PORT (Check o	ne method only)
I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).	unde	using the selective method of support (or cite-all option if the selective method), and have included with this form a eleted list of data requirements (the Data Matrix form must be ).
SECTION II: GENERAL	OFFER TO PA	Υ
Required if using the cite-all method or when using the cite-all option under the selection.  I hereby offer and agree to pay compensation, to other persons, with regard to	o the approval o	
	o the approval o	
I hereby offer and agree to pay compensation, to other persons, with regard to SECTION III: CERT  I certify that this application for registration, this form for reregistration, or the application for registration, the form for reregistration, or the Data-Call-In response. In adicated in Section I, this application is supported by all data in the Agency's files the substantially similar product, or one or more of the ingredients in this product; and (2) requirements in effect on the date of approval of this application if the application sour	o the approval of TIFICATION  his Data-Call-In a addition, if the at (1) concern the is a type of data	response is supported by all data submitted or cited in the cite-all option or cite-all option under the selective method a properties or effects of this product or an identical or that would be required to be submitted under the data
I hereby offer and agree to pay compensation, to other persons, with regard to SECTION III: CERT Certify that this application for registration, this form for reregistration, or the pata-Call-In response. In indicated in Section I, this application is supported by all data in the Agency's files the substantially similar product, or one or more of the ingredients in this product; and (2) requirements in effect on the date of approval of this application if the application sources.  I certify that for each exclusive use study cited in support of this registration.	o the approval of TIFICATION  his Data-Call-In addition, if the at (1) concern the is a type of data ght the initial region.	response is supported by all data submitted or cited in the cite-all option or cite-all option under the selective method is a properties or effects of this product or an identical or that would be required to be submitted under the data instration of a product of identical or similar composition and
I hereby offer and agree to pay compensation, to other persons, with regard to SECTION III: CERT I certify that this application for registration, this form for reregistration, or the application for registration, the form for reregistration, or the Data-Call-In response. In adicated in Section I, this application is supported by all data in the Agency's files the substantially similar product, or one or more of the ingredients in this product; and (2) equirements in effect on the date of approval of this application if the application sources.  I certify that for each exclusive use study cited in support of this registration he written permission of the original data submitter to cite that study.  I certify that for each study cited in support of this registration or reregistration by the original data submitter to use the compensation have expired for the study; (d) the study is in the public literature; or (e) offered (l) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)	o the approval of the approval of the approval of the approval of the at (1) concern the is a type of date ght the initial region or reregistration on that is not arrestudy in support I have notified it.	response is supported by all data submitted or cited in the cite-all option or cite-all option under the selective method a properties or effects of this product or an identical or that would be required to be submitted under the data instration of a product of identical or similar composition and in, that I am the original data submitter or that I have obtained exclusive use study, either: (a) I am the original data of this application; (c) all periods of eligibility for an writing the company that submitted the study and have
I certify that this application for registration, this form for reregistration, or the application for registration, the form for reregistration, or the Data-Call-In response. In indicated in Section I, this application is supported by all data in the Agency's files the substantially similar product, or one or more of the ingredients in this product; and (2) requirements in effect on the date of approval of this application if the application sources.  I certify that for each exclusive use study cited in support of this registration he written permission of the original data submitter to cite that study.  I certify that for each study cited in support of this registration or reregistration by the compensation have expired for the study; (d) the study is in the public literature; or (e) affected (I) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will evidence to the Agency upon request, I understand that the Agency may initiate action in the extent required that the Agency may initiate action or request, I understand that the Agency may initiate action is required.	o the approval of the approval of the approval of the approval of the at (1) concern the is a type of date ght the initial region or reregistration on that is not are study in support I have notified in (c)(2)(B) of FIFR pies of all offers be submitted to	response is supported by all data submitted or cited in the cite-all option or cite-all option under the selective method a properties or effects of this product or an identical or that would be required to be submitted under the data instration of a product of identical or similar composition and in, that I am the original data submitter or that I have obtained a exclusive use study, either: (a) I am the original data of this application; (c) all periods of eligibility for an writing the company that submitted the study and have A; and (ii) to commence negotiations to determine the to pay compensation and evidence of their delivery in the Agency upon request. Should I fail to produce such
I certify that this application for registration, this form for reregistration, or the application for registration, the form for reregistration, or the Data-Call-In response. In indicated in Section I, this application is supported by all data in the Agency's files the substantially similar product, or one or more of the ingredients in this product; and (2) requirements in effect on the date of approval of this application if the application sources.  I certify that for each exclusive use study cited in support of this registration the written permission of the original data submitter to cite that study.  I certify that for each study cited in support of this registration or reregistration be understood to the permission of the original data submitter to use the submitter; (b) I have obtained the permission of the original data submitter to use the offered (I) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(amount and terms of compensation, if any, to be paid for the use of the study.  I certify that in all instances where an offer of compensation is required, collected in the Agency upon request, I understand that the Agency may initiate action of IFRA.  I certify that the statements I have made on this form and all attachments.	o the approval of TIFICATION  his Data-Call-In a addition, if the at (1) concern the is a type of data ght the initial region or reregistration ion that is not arrestudy in support I have notified in C)(2)(B) of FIFR pies of all offers be submitted to in to deny, cancern the control of the	response is supported by all data submitted or cited in the cite-all option or cite-all option under the selective method is a properties or effects of this product or an identical or a that would be required to be submitted under the data distration of a product of identical or similar composition and in, that I am the original data submitter or that I have obtained a exclusive use study, either: (a) I am the original data of this application; (c) all periods of eligibility for an writing the company that submitted the study and have A; and (ii) to commence negotiations to determine the lot pay compensation and evidence of their delivery in the Agency upon request. Should I fall to produce such all or suspend the registration of my product in conformity with the Agency and complete. I acknowledge that any
I certify that this application for registration, or the Data-Call-In response. In indicated in Section I, this application is supported by all data in the Agency's files the substantially similar product, or one or more of the ingredients in this product; and (2) requirements in effect on the date of approval of this application if the application sources.  I certify that for each exclusive use study cited in support of this registration the written permission of the original data submitter to cite that study.  I certify that for each study cited in support of this registration or reregistration the written permission of the original data submitter to use the compensation have expired for the study; (d) the study is in the public literature; or (e) offered (l) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(amount and terms of compensation, if any, to be paid for the use of the study.  I certify that in all instances where an offer of compensation is required, confered with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will swidence to the Agency upon request, I understand that the Agency may initiate action of the permission is required.	o the approval of TIFICATION  his Data-Call-In a addition, if the at (1) concern the is a type of data ght the initial region or reregistration ion that is not arrestudy in support I have notified in C)(2)(B) of FIFR pies of all offers be submitted to in to deny, cancern the control of the	response is supported by all data submitted or cited in the cite-all option or cite-all option under the selective method is properties or effects of this product or an identical or a that would be required to be submitted under the data distration of a product of identical or similar composition and in, that I am the original data submitter or that I have obtained a exclusive use study, either: (a) I am the original data of this application; (c) all periods of eligibility for an writing the company that submitted the study and have A; and (ii) to commence negotiations to determine the lot pay compensation and evidence of their delivery in the Agency upon request. Should I fall to produce such all or suspend the registration of my product in conformity with the Agency and complete. I acknowledge that any

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### R 310

End Use (EP) or Manufacturing Use (MP) product or Technical Grade of the Active Ingredient (TGAI). Must submit Group A and B product chemistry data for each proposed product unless it's a 100% identical (repack): YES or NO (circle one)

Guideline No.	Group A: Product Chemistry Data					2 The Part of the		TGAI	TGAI	
	Study Title	Yes	No	Yes	No	Yes	No			
830.1550	Product Identity & Composition	/				I TE				
830.1600	Description of materials used to produce the product	V								
830.1650	Description of formulation process	/								
830.1670	Discussion on the formation of impurities	V								
830.1700	Preliminary analysis		/							
830.1750	Certified limits (158.345)(CSF)	/								
830.1800	Enforcement analytical method	/								

Guideline	Group B: Product Chemistry Data Study	EP Do	1,0,170	MP Data Submitted		TGAI	
No.	Title	Yes	No	Yes	No	Yes	No
830.6302	Color	/					
830.6303	Physical State	V					
830.6304	Odor	/					
830.6313	Stability to normal and elevated temperatures metal and metal ions						
830.6314	Oxidation/Reduction (Chemical incompatibility)	V					
830.6315	Flammability	V					
830.6316	Explodability	V					
830.6317	Storage stability		/				
830.6319	Miscibility		-				
830.6320	Corrosion Characteristics		V				
830.6321	Dielectric Breakdown Voltage			R-3			
830.7000	рН	/					
830.7050	UV/ Visible Absorption						
830.7100	Viscosity (1 (sted as 830.6318 in datamatrix)	V					
830.7200	Melting Point						
830.7220	Boiling Point						
830.7300	Density (listed as 730.7050 in datamam)	OV					
830.7370	Dissociation Constant						
830.7550	Partition Coefficient						
830.7840	Water Solubility						
830.7950	Vapor Pressure						

Grayed out = data not required

# See data marrix footnotes

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\* registrant states that this product properties are such that none of these (+)

### R 310

New products must either: 1) supply the product specific acute toxicity 6 pack data (listed below), or 2) provide a bridging rationale document. The bridging document directs OPP to use a currently registered set of 6 acute toxicity data and label; instead of submitting product specific data.

Guideline	Acute toxicity (6 pack)	Data submitted		Cited		
No.	Study Title	Yes	No	Yes	No	
870.1100	Acute Oral (LD50)	<b>V</b>				
870.1200	Acute Dermal (LD50)	1				
870.1300	Acute Inhalation (LC50)	V				
870.2400	Acute Eye Irritation	/				
870.2500	Acute Dermal Irritation	V				
870.2600	Dermal Sensitization	/				

Efficacy – which guideline is used depends on the proposed label use NOT Submitted

Guideline		Data subm	nitted	Cit	ed	
No.	Study Title	Yes	No	Yes	No	Comments
810.3100	Soil Treatments for Imported Fire Ants		1		1	
810.3200	Livestack, Poultry, Fur and Wool-Bearing Animal Treatments		1		/	
810.3300	Treatments to Control Pests of Humans and Pets		/		/	
810.3400	Mosquita, Black Fly, and Biting Midge (Sand Fly) Treatments		1		1	
810.3500	Premises Treatments		/		/	
810.3600	Structural Treatments		/		/	
810.3800	Methods for Efficacy Testing of Termite Baits		/		/	

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		DATA MATRIX	C		
Date September 08, 2010			EPA Reg. No./File Symbol 8	3100 - TBA	Page 1 of
Applicant's/Registrant's Name & A	Address ROTAM AGROCHEMICAL COMPAN' C/O IPM Resources LLC (Agent) 4032 Crockers Lake Blvd., Suite 818 Sarasota, FL 34238	YLIMITED	Product ROTAM METHOMYL 29L	V INSECTICIDE	
Ingredient METHOMYL					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Group A - Product Identity	, Composition and Analysis Test Guidelines				
830.1550	Product Identity Composition		ROTAM AGROCHEMICAL COMPANY L	D OWN	See Volume 1; CSF 11/10/09
830.1600	Description of Materials		ROTAM AGROCHEMICAL COMPANY L	D OWN	See Volume 1
830.1650	Description of Formulation Process		ROTAM AGROCHEMICAL COMPANY L	D OWN	See Volume 1
830.1670	Discussion of Formation of Impurities		ROTAM AGROCHEMICAL COMPANY L	D OWN	See Volume 1
830.1700	Preliminary Analysis			NA	
830.1750	Certified Limits		ROTAM AGROCHEMICAL COMPANY L	D OWN	CSF 11/10/09
830.1800	Enforcement Analytical Methods		ROTAM AGROCHEMICAL COMPANY L	D OWN	See Volume 3
830.1900	Submittal of Samples			NA	
Group B - Physical/	Chemical Properties Test Guidelines				
830.6302	Color		ROTAM AGROCHEMICAL COMPANY L	D OWN	See Volume 4
830,6303	Physical State		ROTAM AGROCHEMICAL COMPANY L	D OWN	See Volume 4
880,6304	Stor		ROTAM AGROCHEMICAL COMPANY LT	D OWN	See Volume 4
Signature	19/01/2		Name and Title Frank E. Sobotka, Ph.	D. Agent	Date 09/08/2010

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ate September 08, 2010			EPA Reg. No./File Symbol 83100 - TBA		Page 2 of 6
pplicant's/Registrant's Name & Address	ROTAM AGROCHEMICAL COMPANY LIMIT C/O IPM Resources LLC (Agent) 4032 Crockers Lake Blvd., Suite 818 Sarasota, FL 34238	ED	Product ROTAM METHOMYL 29LV INSECTICIDE		
ngredient METHOMYL					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Group B - Physical/Chemica	l Properties Test Guidelines (Continued)				
830.6313	Stability		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
830.6314	Oxidization/Reduction		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
830.6315	Flammability		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
830.6316	Explodability		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
830.6317	Storage Stability			NA	Footnote 1
830.6318	Viscosity		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
830.6319	Miscibility			NA	See Footnote 2
830.6320	Corrosion Characteristics			NA	Footnote 1
830.6321	Dielectric Breakdown Voltage			NA	Footnote 3
830.7000	рН		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
830.7050	Density/Relative Density		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
	Persistent Foaming		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
	Surface tension		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
	Acidity/Alkalinity		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
	Autoflammability		ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
	••••				
Signature	Sola		Name and Title Frank E. Sobotka, Ph.D. Agent		Date 09/08/2010

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#### DATA MATRIX Page 3 of 6 Date September 08, 2010 EPA Reg. No./File Symbol 83100 - TBA Applicant's/Registrant's Name & Address ROTAM AGROCHEMICAL COMPANY LIMITED Product C/O IPM Resources LLC (Agent) ROTAM METHOMYL 29LV INSECTICIDE 4032 Crockers Lake Blvd., Suite 818 Sarasota, FL 34238 Ingredient METHOMYL Guideline Reference Number Guideline Study Name MRID Number Submitter Status Note **Group A - Acute Toxicity Test Guidelines** 870,1100 OWN See Volume 6 Acute Oral Toxicity - Rat ROTAM AGROCHEMICAL COMPANY LTD 870.1200 Acute Dermal Toxicity - Rat ROTAM AGROCHEMICAL COMPANY LTD OWN See Volume 6 870.1300 Acute Inhalation Toxicity - Rat ROTAM AGROCHEMICAL COMPANY LTD OWN See Volume 6 870.2400 Acute Eye Irritation - Rabbit ROTAM AGROCHEMICAL COMPANY LTD OWN See Volume 6 OWN See Volume 6 870.2500 Acute Dermal Irritation - Rabbit ROTAM AGROCHEMICAL COMPANY LTD OWN See Volume 6 ROTAM AGROCHEMICAL COMPANY LTD Skin Sensitization Signature Date Name and Title Frank E. Sobotka, Ph.D. Agent 09/08/2010

EDA Form 8570-35 (9-97) Electronic and Paper versions available. Submit only Paper version.

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Date September 08, 20	010		EPA Reg. No./File Symbol 81598 - TBA		Page 4 of 6
Applicant's/Registrant's Na			Product ROTAM METHOMYL 29LV INSEC	TICIDE	
ngredient METHOMYL					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
	Generic Data [FORMULATOR'S EXEMPTION]	CITE - ALL	E. I. DU PONT DE NEMOURS AND CO., INC. DUPONT CROP PROTECTION (\$300/427) PO BOX 30 NEWARK, DE 19714-0030	PAY	
			BAYER CROPSCIENCE LP 2 T.W. ALEXANDER DRIVE RESEARCH TRIANGLE PARK, NC 27709		
			FARNAM COMPANIES INC D/B/A CENTRAL LIFE SCIENCES 301 WEST OSBORN ROAD PHOENIX, AZ 85013		
			WELLMARK INTERNATIONAL 1501 E. WOODFIELD ROAD SUITE 200 WEST SCHAUMBURG, IL 60173		
			DENKA INTERNATIONAL 4 TAR ROCK ROIAD WESTPORT, CT 06880		
			BURLINGTON SCIENTIFIC CORPORATION 71 CAROLYN BLVD FARMINGDALE, NY 11735		
			SPRAY DRIFT TASK FORCE MCKENNA, LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006		
			AGRICULTURAL REENTRY TASK FORCE 13604 STREET, \$10. WASHINGTON, DC 20002		
Signature	en soll		Name and Title Frank E. Sobotka, Ph.D. Ag	gent	Date 09/08/2010

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		DATA MATRIX			
Date September 08, 2	010		EPA Reg. No./File Symbol 81598 - TBA	Pa	ge 5 of 6
Applicant's/Registrant's N	ame & Address ROTAM LTD C/O IPM Resources LLC (Agent) 4032 Crockers Lake Blvd., Suite 818 Sarasota, FL 34238		Product ROTAM METHOMYL 29LV INSECTICIDE		
ngredient METHOMYL					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
	Generic Data [FORMULATOR'S EXEMPTION]	CITE - ALL	TROY BIOSCIENCES INCORPORATED C/O TROY CORPORATION 8 VREELAND ROAD FLORHAM PARK, NJ 07932	PAY	
			GLADES FORMULATING CORP 30856 ROCKY ROAD GREELEY, CO 80631-9375		
			AGRICULTURAL HANDLERS EXPOSURE TASK FORCE PO BOX 509 MACON, MO 63552		
			FIFRA ENDANGERED SPECIES TASK FORCE, L C/O HAROLD HIMMELMAN (BEVERIDGE & DIAMOND) 1350 I STREET, NW WASHINGTON, DC 20005		
		6.	RESIDENTIAL EXPOSURE JOINT VENTURE 900 17TH STREET, NW, SUITE 300 WASHINGTON, DC 20006		
			NOVARTIS ANIMAL HEALTH US, INC. 3200 NORTHLINE AVENUE, SUITE 300 GREENSBORO, NC 27408		
Signature	2/5/		Name and Title Frank E. Sobotka, Ph.D. Agent		Date 09/08/20

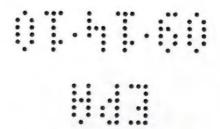
### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M STREET, S.W. WASHINGTON, D.C. 20460

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Date September 08, 2010		EPA Reg. No./File Symbol 83100 - TBA	Page 6 of 6
		Product	1 - 3
Applicant's/Registrant's Name & Address	ROTAM AGROCHEMICAL COMPANY LIMITED C/O IPM Resources LLC 4032 Crockers Lake Blvd., Suite 818 Sarasota, FL 34238	ROTAM METHOMYL 29LV INSECT	ICIDE

#### FOOTNOTES:

- One year Commercial Stability (830.6317) and Corrosion Characteristics (830.6320) will be conducted and a report sent to the USEPA upon completion.
- 2. Product is not an emulsifiable liquid.
- 3. Not registered for use around electrical power boxes.



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		DATA MATRIX			-
Date September 08, 2010			EPA Reg. No./File Symbol	83100 - TBA	Page 1 of 6
Applicant's/Registrant's Name & Ac	ddress ROTAM AGROCHEMICAL CC C/O IPM Resources LLC (Age 4032 Crockers Lake Blvd., Sui Sarasota, FL 34238	ent)	Product ROTAM METHOMYL 2:	OLV INSECTICIDE	
Ingredient METHOMYL					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			ROTAM AGROCHEMICAL COMPANY	TD OWN	See Volume 1; CSF 11/10/09
			ROTAM AGROCHEMICAL COMPANY	LTD OWN	See Volume 1
			ROTAM AGROCHEMICAL COMPANY	TD OWN	See Volume 1
			ROTAM AGROCHEMICAL COMPANY	TD OWN	See Volume 1
				NA NA	
			ROTAM AGROCHEMICAL COMPANY	TD OWN	CSF 11/10/09
			ROTAM AGROCHEMICAL COMPANY	TD OWN	See Volume 3
				NA	
			ROTAM AGROCHEMICAL COMPANY	TD OWN	See Volume 4
			ROTAM AGROCHEMICAL COMPANY	TD OWN	See Volume 4
			ROTAM AGROCHEMICAL COMPANY I	TD OWN	See Volume 4
Signature	Solle	•			Date 09/08/2010

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		DATA MA	ATRIX		_
Date September 08, 2010			EPA Reg. No./File Symbol 83100 - TBA		Page 2 of 6
Applicant's/Registrant's Name & Address	ROTAM AGROCHEMICAL COMPA C/O IPM Resources LLC (Agent) 4032 Crockers Lake Blvd., Suite 81 Sarasota, FL 34238		Product ROTAM METHOMYL 29LV INSECTICIDE		
ngredient METHOMYL	195 t H				
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
			ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
			ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
			ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
			10	NA	Footnote 1
			ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
				NA	See Footnote 2
				NA	Footnote 1
				NA	Footnote 3
			ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
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			ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
			ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
			ROTAM AGROCHEMICAL COMPANY LTD	OWN	See Volume 4
			ROTAM-AGROCHEMIGAL COMPANY LTD	OWN	See Volume 4
Signature	Sort		Name and Title Frank E. Solotka, Ph.D. Agent		Date 09/08/2010 309

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#### Street, S.W., Washington, DC 20460. Do not send the form to this address. **DATA MATRIX** Date September 08, 2010 EPA Reg. No./File Symbol 83100 - TBA Page 3 of 6 Applicant's/Registrant's Name & Address ROTAM AGROCHEMICAL COMPANY LIMITED Product ROTAM METHOMYL 29LV INSECTICIDE C/O IPM Resources LLC (Agent) 4032 Crockers Lake Blvd., Suite 818 Sarasota FL 34238 Ingredient METHOMYL MRID Number Guideline Reference Number Guideline Study Name Submitter Status Note ROTAM AGROCHEMICAL COMPANY LTD OWN See Volume 6 ROTAM AGROCHEMICAL COMPANY LTD OWN See Volume 6 OWN See Volume 6 ROTAM AGROCHEMICAL COMPANY LTD ROTAM AGROCHEMICAL COMPANY LTD OWN See Volume 6 ROTAM AGROCHEMICAL COMPANY LTD OWN See Volume 6 ROTAM AGROCHEMICAL COMPANY LTD OWN See Volume 6 Name and Title Frank E. Sobotka, Ph.D. Agent Signature Date 09/08/2010 EPA Form 8570-35 (9-97) Electronic and Paper versions available. Submit only Paper version. Agency Internal Use Copy

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Date September 08, 2	010		DATA MATRIX	EPA Reg. No./File Symbol 81598 - TBA		Page 4 of 6
Applicant's/Registrant's N		ROTAM LTD C/O IPM Resources LLC (A 4032 Crockers Lake Blvd., Si Sarasota, FL 34238	gent) uite 818	Product  ROTAM METHOMYL 29LV INSEC	TICIDE	Fage 4 010
ngredient METHOMYL						
Suideline Reference Number	Guideline S	tudy Name	MRID Number	Submitter	Status	Note
				E. I. DU PONT DE NEMOURS AND CO., INC. DUPONT CROP PROTECTION (S300/427) PO BOX 30 NEWARK, DE 19714-0030	PAY	
				BAYER CROPSCIENCE LP 2 T.W. ALEXANDER DRIVE RESEARCH TRIANGLE PARK, NC 27709		
				FARNAM COMPANIES INC D/B/A CENTRAL LIFE SCIENCES 301 WEST OSBORN ROAD PHOENIX, AZ 85013		
				WELLMARK INTERNATIONAL 1501 E. WOODFIELD ROAD SUITE 200 WEST SCHAUMBURG, IL 60173		
				DENKA INTERNATIONAL 4 TAR ROCK ROIAD WESTPORT, CT 06880		
				BURLINGTON SCIENTIFIC CORPORATION 71 CAROLYN BLVD FARMINGDALE, NY 11735		
				SPRAY DRIFT TASK FORCE MCKENNA, LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006		
A Liberto				AGRICULTURAL REENTRY TASK FORCE 1350 I STREET, N.W. WASHINGTON, DC 20005		
Signature	2 - 1	Stort	••••	Name and Title Frank E. Sobotka, Ph.D. Ag	gent	Date 09/08/2010

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			DATA MATRIX	7		
Date September 08, 2				EPA Reg. No./File Symbol 81598 - TBA	Pa	ge 5 of 6
Applicant's/Registrant's N	ame & Address	ROTAM LTD C/O IPM Resources LLC (Agent) 4032 Crockers Lake Blvd., Suite 818 Sarasota, FL 34238		Product ROTAM METHOMYL 29LV INSECTICIDE		
Ingredient METHOMYL						
Guideline Reference Number	Guideline S	Study Name	MRID Number	Submitter	Status	Note
THE		- 1111		TROY BIOSCIENCES INCORPORATED C/O TROY CORPORATION 8 VREELAND ROAD FLORHAM PARK, NJ 07932	PAY	
				GLADES FORMULATING CORP 30856 ROCKY ROAD GREELEY, CO 80631-9375		
				AGRICULTURAL HANDLERS EXPOSURE TASK FORCE PO BOX 509 MACON, MO 63552		
				FIFRA ENDANGERED SPECIES TASK FORCE, L C/O HAROLD HIMMELMAN (BEVERIDGE & DIAMOND) 1350   STREET, NW WASHINGTON, DC 20005		
				RESIDENTIAL EXPOSURE JOINT VENTURE 900 17TH STREET, NW, SUITE 300 WASHINGTON, DC 20006		
				NOVARTIS ANIMAL HEALTH US, INC. 3200 NORTHLINE AVENUE, SUITE 300 GREENSBORO, NC 27408		
			He Halan			
T	, is	SID	1.1	Name and Title Frank E. Sobotka, Ph.D. Agent		Date 09/08/20

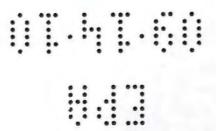
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	DATA MATRIX		_
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Applicant's/Registrant's Name & Address	ROTAM AGROCHEMICAL COMPANY LIMITED C/O IPM Resources LLC 4032 Crockers Lake Blvd., Suite 818 Sarasota, FL 34238	Product  ROTAM METHOMYL 29LV INSECTI	CIDE



Ingredient METHOMYL



### RESTRICTED USE PESTICIDE

Due to high Acute Toxicity to Humans

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP 1A INSECTICIDE

### Rotam Methomyl 29LV Insecticide

Water Soluble Liquid Contains 2.4 lbs. active ingredient per gallon			
Active Ingredient	By Weight		
Methomyl (S-methyl-N-[(methylcarbamoyl) oxy]thioacetimidate)	29%		
Inert Ingredients	71%		
TOTAL	100%		

EPA Reg. No. 83100-TBA

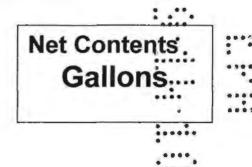
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### KEEP OUT OF REACH OF CHILDREN WARNING

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional Precautionary Statements on inside booklet and back panel of container and Directions for Use on inside booklet.

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826



### RESTRICTED USE PESTICIDE

Due to high Acute Toxicity to Humans

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP 1A INSECTICIDE

### Rotam Methomyl 29SL Insecticide

### KEEP OUT OF REACH OF CHILDREN WARNING

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

#### **FIRST AID**

### (N-Methyl Carbamate insecticide)

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin

immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

### ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING.** FATAL IF SWALLOWED. CONTAINS METHANOL; MAY CAUSE BLINDNESS. CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE.

Do not get in eyes or on clothing. Wear protective eyewear. Harmful if inhaled or absorbed through skin. Avoid contact with skin or breathing spray mist. Wash hands thoroughly with soap and water after handling.

POISONING SYMPTOMS — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section on the ROTAM METHOMYL 29LV label and seek medical attention at once.

### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

TREATMENT — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

Refer to inside for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations, Engineering Controls Statements, Environmental Hazards and Directions for Use.

### Water Soluble Liquid

Contains 2.4 lbs. active ingredient per gallon

Active Ingredient	By Weight		
Methomyl (S-methyl-N-[(methylcarbamoyl) oxy]thioacetimidate) Inert Ingredients	29% 71%		
		TOTAL	100%

Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Net Contents Gallons

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### PRECAUTIONARY STATEMENTS (Continued)

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category B on an EPA chemical-resistance category

Applicators and others exposed to the diluted spray solution must wear:

Long-sleeved shirt and long pants.

Chemical resistant gloves such as barrier laminate or butyl rubber.

Shoes plus socks.

Protective evewear.

Mixers, loaders, cleaners, repairers of application equipment, and others exposed to the concentrate must wear:

Long sleeve shirt and long pants.

Chemical-resistant gloves, such as barrier laminate or butyl rubber.

Socks and chemical resistant footwear.

Protective evewear.

Respirator as outlined below.

Chemical resistant apron.

For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any R, P, or HE prefilter.

For exposures outdoors, Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any R, P, or HE prefilter. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other

### **ENGINEERING CONTROL STATEMENTS**

Human flaggers must be in enclosed cabs.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must not assist in the mixing and loading operations.

### USER SAFETY RECOMMENDATIONS USERS SHOULD:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove personal protective equipment immediately after handling this product.
- Wash the outside of gloves before removing.
- As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

#### PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation.

### DIRECTIONS FOR USE Restricted Use Pesticide

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.



Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). REI Summary: REI grapes = 7 day; REI peaches = 4 day; REI apple, cotton, grapefruit, lemon, nectarine, orange, tangelo, tangerine = 3 day; all other WPS uses = 48 hour REI.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls.

Chemical-resistant gloves, such as barrier laminate or butyl rubber.

Shoes plus socks.

Protective eyewear.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Notify workers of the application to grapes by warning them orally <u>and</u> by posting Warning signs at entrances to treated areas.

#### GENERAL INFORMATION

Chemigation: Overhead sprinkler chemigation is allowed for use in alfalfa, barley, succulent and dry beans, oats, onions, succulent peas, potatoes, rye, sugar beets, sweet corn and wheat. Drip chemigation is allowed for onions. See Federal Supplemental labeling for overhead sprinkler chemigation directions for use in sweet corn, succulent peas and succulent and dry beans; and for directions for use for drip chemigation in onions. Refer to supplemental, or Special Local Need (SLN) labeling or the crop specific sections of this label for use directions for chemigation. Do not apply this product through any other type of irrigation systems, except those allowed by instructions provided in a supplemental, SLN or this product label.

Do not formulate this product into other End-use products without written permission from Rotam.

ROTAM METHOMYL 29LV insecticide should be used only in accordance with directions for use on this label or in separate Rotam supplemental labeling. Rotam will not be responsible for use of the product in a manner not specified by Rotam in the product's labeling and User assumes all risk for such use.

ROTAM METHOMYL 29LV is a water soluble liquid that is applied by foliar application to control many important insect pests. ROTAM METHOMYL 29LV is mixed with water for application.

Pilots must not assist in the mixing and loading operations.

Do not apply by ground equipment within 25 feet, or by air within 100 feet of

lakes, reservoirs, rives, estuaries, commercial fish ponds amenatural, permanent streams, marshes or natural, permanent ponds. Increase the buffer zone to 450 feet from the above aquatic areas when ultra low volume application is made.

Hand-held equipment is prohibited for applications to crops. This product must be applied to crops only with mechanical ground, overhead sprinkler chemigation or aerial application equipment.

Use only in commercial and farm plantings. Not for use in home plantings. Not for use during any period after a commercial crop site is opened for public entry as a "U-Pick", "Pick Your Own" or similar operation; in no case shall preharvest applications be made after first public entry. The restricted entry interval and preharvest interval for the crop stated elsewhere on this label must be followed.

### SCOUTING

Monitor insect populations to determine whether or not there is a need for application of ROTAM METHOMYL 29LV based on locally determined economic thresholds. More than one treatment of ROTAM METHOMYL 29LV may be required to control a population of pests.

### **BENEFICIAL ARTHROPODS**

ROTAM METHOMYL 29LV at rates of 2/5 to 3/4 pint per acre helps conserve certain beneficials, including big-eyed bugs, damsel bugs, flower bugs and spiders in cotton and soybeans. While these beneficials cannot be relied upon to control pests, they are of potential value and should be monitored along with pests in pest management programs on these crops.

### RESISTANCE MANAGEMENT

For resistance management, ROTAM METHOMYL 29LV insecticide is a group 1A insecticide. Repeated and exclusive use of ROTAM METHOMYL 29LV or other group 1A insecticides may lead to the build-up of resistant strains of insects in some crops. Not all members of this group have been shown to be cross-resistant. Different resistance mechanisms that are not linked to target site of action, such as enhanced metabolism, are common for this group of chemicals. Alternation of compounds from different sub-groups within this group may be an acceptable part of an integrated pest management program.

Some insects are known to develop resistance to products used repeatedly for control. When this occurs, the recommended dosages fail to suppress the pest population below the economic threshold. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode-of-action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of

control for your areas or additional information on insect researce monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at <a href="http://www.irac-online.org">http://www.irac-online.org</a>.

### INTEGRATED PEST MANAGEMENT

This product should be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

### SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying ROTAM METHOMYL 29LV.

Fill spray tank 1/4 to 1/2 full of water. Add ROTAM METHOMYL 29LV directly to spray tank. Mix thoroughly. Use mechanical or hydraulic means; do not use air agitation. Spray mix should not be stored overnight in spray tank.

Compatibility — Since formulations may be changed and new ones introduced, in this situation users can premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.) before applying the product. Avoid mixtures of several materials and very concentrated spray mixtures.

Do not use ROTAM METHOMYL 29LV with Bordeaux mixture (copper sulfate and hydrated lime), Du Ter triphenyltin hydroxide, lime sulfur, Rayplex iron nor in highly alkaline solutions. Use mildly alkaline mixtures immediately after mixing to prevent loss of insecticidal activity.

**Tank Mix Sequence** – Add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after addition of each product.

- 1. Water soluble bags.
- 2. Water dispersible granules
- 3. Wettable powders
- 4. Water based suspension concentrates
- ROTAM METHOMYL 29LV and other water soluble concentrates
- 6. Oil based suspension concentrates
- 7. Emulsifiable concentrates
- Adjuvants, surfactants, oils, soluble fertilizers, and drift retardants. Follow local practice and manufacturer's recommendation.

#### APPLICATION

Apply at the recommended rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Follow-up treatments of ROTAM METHOMYL 29LV should be applied, as needed, to keep pest populations within threshold limits. On most crops, ROTAM

METHOMYL 29LV would be applied at 5 to 7 day intervals commaintain control. Refer to crop specific directions for use in the crop tables for more specific information on treatment intervals.

Use sufficient water to obtain thorough, uniform coverage. Since ROTAM METHOMYL 29LV is a fast acting contact insecticide, best results follow direct spraying of the target insect.

For aerial, use a minimum of 2 gals. per acre (gpa) except 10 gpa for grapes, peaches, and nectarines; 15 gpa for oranges, lemons, grapefruit, tangelos and tangerines.

ROTAM METHOMYL 29LV is recommended for use as a low volume aerial spray 0.53 gpa (2L) for cotton\* and soybeans\* and 1 gpa for the crops listed below providing the following conditions are met:

- -equipment is adjusted to distribute spray uniformly over the spray swath,
- wind conditions and other factors such as temperature and humidity are such
- -that the spray is delivered to the target area,
- -local regulations do not prohibit low-volume aerial sprays,
- -use rates are applied as directed on the package label or supplemental labeling for the following crops:

Alfalfa Celery Peas (succulent) Anise Collards Peppermint Asparagus Corn Peppers Barley Cotton Potato Beans Cucumber Rye Broccoli Lettuce Soybean Brussels sprouts Melons Spinach Mint Cabbage Sugar beet Carrot Oats Summer Squash Cauliflower Peanuts Wheat

Apply the low rates on small plants, small insects and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use 1 to 3 applications of the highest recommended rate for controlling severe infestations. Hereafter, use the lowest rate possible to maintain control.

### SPRAY TANK CLEANOUT

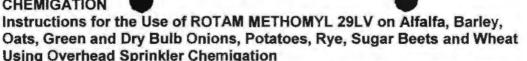
Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

<sup>\*</sup> Not Registered for aerial application in a diluted volume of less than 1 gal in CA.

CHEMIGATION



Overhead chemigation applications offer the advantage of greater penetration and coverage of the target plant. However, typical chemigation applications are more dilute than ground or aerial applications. For best results, it is recommended to keep the concentration of ROTAM METHOMYL 29LV as high as possible in the application. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre.

ROTAM METHOMYL 29LV is most active as a contact insecticide, although it does also have activity via ingestion of treated plants. For best results, applications of ROTAM METHOMYL 29LV should take place when the insects are active and most likely to come into direct contact with the application.

Types of Irrigation Systems:

ROTAM METHOMYL 29LV may be applied through overhead sprinkler irrigation systems for control of various pests. The irrigation system used must provide uniform water distribution. Do not use filter screens smaller than 50 mesh throughout the system, due to possible build up of material on 100 mesh or smaller screens. Do not apply ROTAM METHOMYL 29LV through any other type of irrigation systems, except those allowed by instructions provided in a supplemental, SLN, or this product label.

#### **General Directions for Chemigation:** Preparation

A pesticide tank is recommended for the application of ROTAM METHOMYL 29LV in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Add 1/4 to 1/2 of the desired amount of water and then measure the required amount of ROTAM METHOMYL 29LV into the tank. Complete filling the tank by adding the required amount of water. Agitate thoroughly to insure a uniform solution of ROTAM METHOMYL 29LV. Once in solution, no further agitation is required. Injection solution should not be stored overnight. Highly alkaline water should be buffered so that the pH of the spray solution is in the range of neutral to slightly acidic (pH5-7).

#### Injection into Chemigation Systems

Inject the proper amount of the ROTAM METHOMYL 29LV solution into the irrigation water flow using a positive displacement injection pump. Injection should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water.

#### **Uniform Water Distribution**

The irrigation system used for application of ROTAM METHOMYL 29LV must provide for uniform distribution of ROTAM METHOMYL 29LV treated water. Nonuniform distribution might result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.

Equipment calibrath

Calibrate the irrigation system and injector before applying ROTAM METHOMYL 29LV. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, you should contact your state extension service specialists, equipment manufacturer or other experts.

**Monitoring of Chemigation Applications** 

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for cleaners and repairers of application equipment when making adjustments or repairs on the chemigation system when ROTAM METHOMYL 29LV is in the irrigation water.

**Required System Safety Devices** 

Do not connect any irrigation system used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction.

There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

Posting of Areas teme Treated

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any other public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to all the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The signs shall be printed in ENGLISH. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color, which sharply contrasts with their immediate background. At the top of the sign shall be the words "KEEP OUT", followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word "STOP". Below the symbol shall be the words "PESTICIDE IN IRRIGATED WATER".

Posting for chemigation does not replace other posting and reentry requirements for farm worker safety.

#### Operation

Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injection system according to the directions above. This procedure is necessary to deliver the desired rate per acre in a uniform manner. Apply ROTAM METHOMYL 29LV in 0.1 to 0.2 inches of water per acre. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system. End guns must be turned off during the application, if they irrigate nontarget areas or if they do not provide uniform application and coverage.

Nozzles in the immediate area of control panels, chemical supply tanks, wellheads and system safety devices must be plugged to prevent contamination of these areas.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Do not apply when system connections or fittings leak or when nozzles do not provide uniform distribution.

#### Cleaning the System

Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner's manual or your local equipment dealer for cleanout procedures for your injection system.

### SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

 The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

# AERIAL DRIFT REDUCTION ADVISORY INFORMATION Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

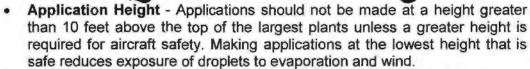
#### Controlling Droplet Size - General Techniques

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle.
   Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### Controlling Droplet Size - Aircraft

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released parallel
  to the airstream produces larger droplets than other orientations and is the
  recommended practice. Significant deflection from horizontal will reduce
  droplet size and increase drift potential.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types and the lowest drift.
- Boom Length For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift

without reducing ath width.



 Swath Adjustment - When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downward edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

#### **BOOM HEIGHT**

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. AVOID GUSTY OR WINDLESS CONDITIONS.

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### **TEMPERATURE INVERSIONS**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind.

However, it is the reconsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

#### AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

**Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

#### AIR ASSISTED (AIR BLAST) TREE AND VINE SPRAYERS

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides. In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift;

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

Crops	Insects	Rate ROTAM METHOMYL 29LV Pts. Per Acre	Last Application -Days To Harvest	RE
Alfalfa	Pea Aphid Lygus Bugs Blotch Leafminer Aphids Egyptian Alfalfa Weevil Larvae Loopers Beet Armyworm Armyworm Alfalfa Caterpillar Fall Armyworm Western Yellowstriped Armyworm Yellowstriped Armyworm	1 1/2 – 3	7 *	48 hr
	Alfalfa Weevil Larvae	3		
	Variegated Cutworm	3/4 - 3		

	Do not ap more than 12 pints of R Do not make more than 10 application Chemigation: ROTAM METHOMYL 2 chemigation. For best results, use the 29LV. Apply in 0.1 to 0.2 inches of we more information.	ns per crop. 29LV may be applied by a highest listed rate of l	y overhead sprinkler ROTAM METHOMYL	
Anise (Fennel)	Cabbage Looper	3	7	48 hrs
	Beet Armyworm	1 1/2 - 3		
	Do not apply more than 15 pints of R Do not make more than 10 application		LV per acre per crop.	
<b>Apple</b> Ground application only	Apple Aphid Rosy Apple Aphid Tufted Apple Budmoth Green Fruitworm Tarnished Plant Bug	1 1/2 - 3 *	14	72 hrs
	Codling Moth (10-12 day spray intervals)			
	Leafrollers (Fruit-tree, Obliquebanded, Redbanded, Variegated) Lesser Appleworm White Apple Leafhopper Tentiform Leafminer Cutworm	3*		
	Do not use on Early Macintosh & Wealthy varieties Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 5 applications per crop; minimum interval between treatments is 7 days.  * Apply in a minimum of 50 gallons of water per acre.			
Asparagus	Beet Armyworm, Western Yellowstriped Armyworm Asparagus Beetle Spotted Asparagus Beetle White Cutworm Redbacked Cutworm	1 1/2 - 3	1	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 15 pints of R Do not make more than 8 application		LV per acre per crop.	
Avocado	Western Avocado Leafroller Omnivorous Looper Do not apply more than 3 pints of RO		1 V per acre per crop.	48 hrs
	Do not make more than 2 application Armyworms	s per crop.		48 hrs

	more information.  *Cereal leaf beetle: ROTAM cereal leaf beetle eggs wher be timed to correspond with egg hatch to achieve maxim currently registered in Califo	HOMYL s, use the hes of we METHO n applied the applied um ovici rnia. crop mu itions (s	29LV may e highest livater per according earance of idal effect.	isted race. See	ate of ROTAM METHOMYL e CHEMIGATION section for rovide contact ovicidal effect on el directions. Application should laid eggs or in anticipation of a this pest stage (egg) is not wing and not under stress from emperatures or drought).	
Beans (Succulent) Including: Kidney Lima Mung	Leafhopper Mexican Bean Beetle		3/4 –	3	Succulent Beans - 3/4 - 1 1/2 pts 1, over 1 1/2 pts 3; 3 - Vines	48 hrs
Navy Pinto Snap	Fall Armyworm Variegated Cutworm		1 1/2		7 - Hay	
Wax Broad Fava Asparagus Blackeyed peas Cowpeas Chick peas Garbanzo beans Sweet lupine White sweet lupine White lupine Grain lupine	Beet Armyworm Corn Earworm Saltmarsh Caterpillar, Yellowstriped Armyworm Western Yellowstriped Armyworm Lygus Bugs Thrips Aphids Loopers*		1 1/2 -	3		
	European Corn Borer (Ovicide & Larvicide) Init when moth flights first app and-continue preventive treatments at 3-4 day inte To control eggs and larvae	rvals				
	Spotted Cucumber Beetle		3/4 – 1	1/2		
	Do not apply more than 15 p Do not make more than 10 a * Do not use for Loopers in A	pplication	ons per cro		YL 29LV per acre per crop.	
Beans (Dry) (Same as Succulent Beans)	(Same as Succulent Beans)	Suc	me as culent ans)		14 - Dry Beans * 14 - Vines * 14 - Hay *	48 hrs
	Do not apply more than 15 p make more than 10 applicati Do not use for Loopers in AL *Do not apply within 14 days	ons per . & GA.	crop.	ТНОМ	YL 29LV/acre /crop. Do not	
Beets (Table)	Imported Cabbageworm	3/4	1-3		0 - roots	48 hrs
	Beet Armyworm Cabbage Looper Diamondback Moth	11	/2 - 3		10 -tops	

	Cucumber seetle Variegated Cutworm	1 1/2		
	Do not apply more than 12 p Do not make more than 8 apply		OMYL 29LV per acre per crop.	
Bermudagrass pasture	Fall Armyworm Armyworm Striped Grass Looper	3/4 - 3	7 - Forage * 3 - Dehydrated Hay **	48 hrs
	Do not apply more than 3 pi Do not make more than 4 ap * Do not apply within 7 days ** Do not apply within 3 days	oplications per crop. of feeding forage or al	DMYL 29LV per acre per crop.	
Blueberries	Blueberry Leafhopper Aphids Tussock Moth Weevil Sharp-Nosed Leafhopper	1 1/2	3	48 hrs
	Cranberry Fruitworm* Cherry Fruitworm*	1 1/2 – 3		
	Flea Beetle (larvae) Sawfly (larvae) Blueberry Leafroller	3		
	Blueberry Maggot	3/4-1 1/2		
	Do not apply during bloom. Do not apply more than 12 p not make more than 4 applic * For ground use only.		OMYL 29LV per acre per crop. Do	
Broccoli	Loopers Diamondback Moth	1 1/2 - 3**	3	48 hrs
	Imported Cabbageworm	3/4 - 3**		1
	Do not apply more than 21 pints of ROTAM METHOMYL29LV/acre/crop Do not make more than 10 applications per crop; minimum interval between treatments is 2 days.  ** Add a wetting agent to improve coverage.			
Brussels Sprouts	Loopers Imported Cabbageworm, Diamondback Moth	1 1/2 – 3 **	3	48 hrs
	Variegated Cutworm	1 1/2 **		
	Do not apply more than 18 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 10 applications per crop; minimum interval between treatments is 2 days.  ** Add a wetting agent to improve coverage.			
Cabbage	Loopers * Diamondback Moth Fall Armyworm	1 1/2 - 3 **	1	48 hrs
	Imported Cabbageworm	3/4 - 3 **		
	Variegated Cutworm	1 1/2 **		1
		lications per crop; minimu	OMYL 29LV per acre per crop. um interval between treatments is 2	
Carrot	Beet Armyworm Armyworms	1 1/2 - 3	1	48 hrs

	Variegate	3/4 - 1 1/2		
	Do not apply more than 21 pin Do not make more than 10 ap		IOMYL 29LV per acre per crop.	
Cauliflower	Imported Cabbageworm	3/4 - 3 **	3	48 hrs
	Loopers Diamondback Moth	1 1/2 – 3 **		
	Variegated Cutworm	1 1/2 **		
	Do not apply more than 24 pin Do not make more than 10 app treatments is 2 days.  ** Add a wetting agent to impre	plications per crop; r	OMYL 29LV per acre per crop. minimum interval between	
Celery	Beet Armyworm Aster Leafhopper	1 1/2 – 3	7	48 hrs
	Loopers	3		
	Variegated Cutworm	1 1/2		4
	Armyworms	3/4 - 3		
	Do not apply more than 24 pin Do not make more than 10 ap		IOMYL 29LV per acre per crop.	
Chicory	Beet Armyworm Variegated Cutworm Leafhoppers	1 1/2 - 3	80	48 hrs
			DMYL 29LV per acre per crop.	
	Loopers Beet Armyworm	1 1/2 - 3*	10	48 hrs
Chinese Cabbage	Do not apply more than 24 pin Do not make more than 10 app * Minimum of 25 gallons water	plications per crop.	IOMYL 29LV per acre per crop. or 5 gallons by air.	
Collards (Fresh market	Diamondback Moth Variegated Cutworm	1 1/2	10	48 hr
only)	Imported Cabbageworm Beet Armyworm Loopers*	1 1/2 - 3		
	Beet Armyworm Loopers*  Do not apply when temp. is lestall.	ss than 50° F Do not ts of ROTAM METH ications per crop.	apply when crop is less than 10" IOMYL 29LV per acre per crop.	
	Beet Armyworm Loopers*  Do not apply when temp. is lest tall.  Do not apply more than 18 pin Do not make more than 8 apple.	ts of ROTAM METH ications per crop. & GA. 3/4 1 1/2		48 hrs

	Do not may more than 10 applica *Corn forage is green actively grow The plants can be fed directly to ar parts of the plant that remain after remaining stalks and leaves can be	ving plants that are h nimals or used to ma removal of the grain	ke silage. Corn stover are the at full plant maturity. These animals.	
	Earworm-Whorl as needed	1 – 1 1/2	0 -Ears	48 hrs
	Fall Armyworm Armyworm Earworm, (Ovicide/Larvicide) European Corn Borer -Ears 1-3 days or as needed Corn Rootworm (adult beetles) Flea Beetles Picnic Beetles Aphids	3/4 – 1 1/2	3 - Forage 21 - Stover	
Corn (Sweet)	Variegated Cutworm Beet Armyworm	1 1/2		
	treatments is 1 day.  Ovicide/Larvicide - Bollworm Tobacco Budworm - Initiate schedule when significant numbers of eggs are present Continue at 3 to 5-day intervals while eggs are present and larval control is adequate. If significant larvae survive, use higher rates below. Lygus Bugs/Plant Bugs (adults and nymphs) Start	2/5 - 3/4 (see Insect Predator Section)	15	72 hrs
	treatment on low level Population for suppression.			
	Cotton Leafworm	3/4 - 1 1/2		
	Cotton Fleahopper (as needed)	2/5 – 3/4		
	Aphids, Thrips	3/4		1
East of Rockies only	(Early Season) Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/PlantBugs (adults and nymphs) Use as occasional spray in regular schedule but not more often than every 10 days.	1 1/2		

	Bollworm Tobacco Budworm Beet Armyworm Cotton Leafperforator Fall Armyworm Lygus Bugs/Plant Bugs (adult and nymphs) Up to 3 applications at 3-5 day intervals after desired boll load set on plants.			
Texas	Cotton Aphid	3/4 - 2		
West of Rockies only	Larvicide for worms: Bollworm Fall Armyworm Tobacco Budworm Lygus Bugs Beet Armyworm	1 1/2 – 2 1/4		
	Cotton Leafperforator	1 – 2 1/4		
	desired boll load set on plants.  For all applications made to compose than 6 pints of Do not make more than 8 application Do not graze or feed.  Use may redden cotton. If excess	ROTAM METHOMY tions per crop.	YL 29LV per acre per crop.	
Cucumber	Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pt 1 Over 1 1/2 pt 3	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 18 pints of Do not make more than 12 applications		YL 29LV per acre per crop.	
Eggplant	Green Peach Aphid	3/4 – 3	5	48 hrs
	Tomato Pinworm (Ground Application Only) Beet Armyworm Corn Earworm	1 1/2 - 3		
	Do not apply more than 15 pints of Do not make more than 10 applications		IYL 29LV per acre per crop.	
	Beet Armyworm	1 1/2 - 3	10	48 hrs
Endive, Escarole	Do not apply more than 15 pints of Do not make more than 8 applications		YL 29LV per acre per crop.	
Garlic	Beet Armyworm	1 1/2**	7	48 hrs
	Do not apply more than 9 pints of Do not make more than 6 applicat ** Add a wetting agent to improve	ROTAM METHOMY		

Grapefruit CA, AZ & HI only	Thrips Fruitree Leafroller Orange Tortrix Western Tussock Moth Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of Do not make more than 4 applicat		YL 29LV per acre per crop.	
Grapes East of Rockies only	Grape Berry Moth (apply pre- & post-bloom & repeat at 10-14 day intervals or as needed) Leafhoppers	1 1/2 - 3	1 - Fresh & Raisin 14 - Wine Grapes	7 days
All U.S.	Omnivorous Leafroller Grape Leaffolder Orange Tortrix			
West of Rockies only	Saltmarsh Caterpillar Leafhoppers*			
	Climbing Cutworm (Treat infestation and repeat at 7-14 day intervals as needed)	3		
CA only	Grape Leaf Skeletonizer*	1 1/2 - 3		
	Thrips	1 1/2 - 3		
Horseradish	Do not apply more than 15 pints o Do not make more than 5 applicat * Leafhoppers & Grape Leaf Skele  Aphids Thrips	ions per crop.		48 hrs
(Ground application Only)	Do not apply more than 6 pints of Do not make more than 4 applicat		YL 29LV per acre per crop.	
Leafy Green Vegetables: Beet (tops) Dandelions, Kale,	Beet Armyworm Cabbage Looper* Diamondback Moth Imported Cabbageworm	1 1/2 - 3	10	48 hrs
Mustard Greens, Greens, Parsley, Swiss Chard, Turnip Greens	Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.  * Do not use for Cabbage Loopers in AL & GA.			
Lemon CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix Beet Armyworm	1 1/2 - 3	1	72 hrs
	Do not apply more than 9 pints of Do not make more than 4 applicat		YL 29LV per acre per crop.	
Lentils	Western Yellowstriped Armyworm	1 1/2 - 3	21	48 hrs
	Do not apply more than 3 pints of Do not make more than 2 applicat		YL 29LV per acre per crop.	

Alfalfa Louger	3/4 - 3	3/4-1 1/2 nt 7	48 hrs
Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper	1 1/2 - 3	over 1 1/2 pts. – 10	
Variegated Cutworm	1 1/2		
Do not make more than 15 applicat days.  Lettuce (leaf varieties)  Do not apply more than 12 pints  Do not make more than 8 applications	s of ROTAM METH	om interval between treatments is 2  OMYL 29LV per acre per crop.	
Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm	1 1/2 - 3	1 1/2 pts 1 day over 1 1/2 pts 3 days	48 hrs
Variegated Cutworm	1 1/2		
		DMYL 29LV per acre per crop.	
Variegated Cutworm Alfalfa Looper	3	14	48 hrs
Flea Beetles	2 1/4 - 3		
Do not apply more than 6 pints of Do not make more than 4 applic	of ROTAM METHO cations per crop.	MYL 29LV per acre per crop.	
Thrips	1 1/2 – 3	1	72 hrs
		YL 29LV per acre per crop.	
Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
	Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper Variegated Cutworm Lettuce (head varieties) Do not apply more than 24 pints Do not make more than 15 applicat days. Lettuce (leaf varieties) Do not apply more than 12 pints Do not make more than 8 applic treatments is 2 days. Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm Variegated Cutworm  Variegated Cutworm  Do not apply more than 18 pints Do not make more than 12 appl  Variegated Cutworm Alfalfa Looper Flea Beetles  Do not apply more than 6 pints Do not make more than 4 applic Thrips  Do not apply more than 9 pints of Do not make more than 3 applicat  Armyworms Cereal Leaf Beetle*	Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper Variegated Cutworm Lettuce (head varieties) Do not apply more than 24 pints of ROTAM METHO Do not make more than 15 applications per crop; minimularly. Lettuce (leaf varieties) Do not apply more than 12 pints of ROTAM METHO Do not make more than 8 applications per crop; mitreatments is 2 days.  Loopers Tobacco Budworm Beet Armyworm Yellowstriped Armyworm Granulate Cutworm Flea Beetles Cucumber Beetles Melon Aphid Melonworm Pickleworm Fall Armyworm  Variegated Cutworm Fall Armyworm  Variegated Cutworm Alfalfa Looper Flea Beetles  Do not apply more than 18 pints of ROTAM METHO Do not make more than 12 applications per crop.  Variegated Cutworm Alfalfa Looper Flea Beetles  2 1/4 - 3  Do not apply more than 6 pints of ROTAM METHO Do not make more than 4 applications per crop.  Thrips  1 1/2 - 3  Do not apply more than 9 pints of ROTAM METHO Do not make more than 3 applications per crop.	Thrips Aphids Beet Armyworm Cabbage Looper Corn Earworm Aster Leafhopper Variegated Cutworm  1 1/2  Lettuce (head varieties) Do not apply more than 15 applications per crop; minimum interval between treatments is 2 days.  Lettuce (leaf varieties) Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 8 applications per crop; minimum interval between treatments is 2 days.  Loopers Tobacco Budworm Beet Armyworm Granulate Cutworm Flea Beetles Melon Aphid Melonworm Flea Beetles Melon Aphid Melonworm Flall Armyworm Variegated Cutworm Flall Armyworm Variegated Cutworm  Variegated Cutworm  Alfalfa Looper Flea Beetles  Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 4 applications per crop.  Thrips  1 1/2 - 3  1 1/2 pts 1 day over 1 1/2 pts 1 day over 1 1/2 pts 3 days  1 1/2 pts 1 day over 1 1/2 pts 3 days  1 1/2 pts 3 days  1 1/2 pts 1 day over 1 1/2 pts 3 days  1 1/2 pts 1 day over 1 1/2 pts 3 days  1 1/2 pts 3 days  1 1/2 pts 3 days  1 1/2 pts 1 day over 1 1/2 pts 3 days  1 1/2 pts 3 days  1 1/2 pts 1 day over 1 1/2 pts 3 days  1 1/2 pts 3 days  1 1/2 pts 1 day over 1 1/2 pts 3 days  1 1/2 pts 3 days  1 1/2 pts 1 day over 1 1/2 pts 1 day over 1 1/2 pts 3 days  1 1/2 pts 1 day over 1 1/

	Chemigation: ROTAM METHON chemigation. For best results, us 29LV. Apply in 0.1 to 0.2 inches more information.  *Cereal leaf beetle: ROTAM ME cereal leaf beetle eggs when ap be timed to correspond with the egg hatch to achieve maximum currently registered in California  **Aphids: For aphid control, crop adverse environmental condition Applications on Russian wheat a (<10 adults per stem).	se the highest listed rate of water per acre. See of water per acre. See of the thick that is a second to label appearance of newly lain ovicidal effect. Use on the thick that is a sectively growing (such as, extreme ter	e of ROTAM METHOMYL CHEMIGATION section for vide contact ovicidal effect on directions. Application should id eggs or in anticipation of his pest stage (egg) is not ing and not under stress from inperatures or drought).	
Onions	Beet Armyworm	1 1/2 - 3**	7 - Green &	48 hrs
(Green & Dry Bulb)	Thrips* Variegated Cutworm Black Cutworm	3**	Dry Bulb Onions	
	Do not apply more than 18 pints Do not make more than 8 applic treatments is 5 days.  Onions, dry bulb Do not apply more than 12 pints Do not make more than 8 applic treatments is 5 days.  *Chemigation: ROTAM METHO chemigation to control thrips. Be thrips per plant. For best results	of ROTAM METHOMY ations per crop; minimu  MYL 29LV may be applications before use the highest rate of	L 29LV per acre per crop. m treatment interval between ed by overhead sprinkler thrips populations reach 3-5 ROTAM METHOMYL 29LV	
	CHEMIGATION section for more  ** Add a wetting agent to improve		per acre. See	
Oranges CA, AZ & HI only	CHEMIGATION section for more	e information.	per acre. See	72 hrs
CA, AZ & HI	CHEMIGATION section for more ** Add a wetting agent to improve Thrips Western Tussock Moth Orange Tortrix Fruittree Leafroller Beet Armyworm	e information. re coverage.  1 1/2 - 3  of ROTAM METHOMYL	1	72 hrs

	type instruction in the control of t			
	Do not apply more than 18 pints Do not make more than 6 appli * Oriental Fruit Moth (Ground A	cations per crop.	MYL 29LV per acre per crop.	i
Peanuts	Corn Earworm* Potato Leafhopper Fall Armyworm	3/4 – 3	21	48 hrs
	Beet Armyworm	1 1/4 - 3		
	Green Cloverworm Velvetbean Caterpillar Cabbage Looper Soybean Looper ** Thrips Granulate Cutworm	1 1/2 – 3		
	Do not apply more than 12 pints Do not make more than 8 applic Do not feed treated vines. * ROTAM METHOMYL 29LV ha **Soybean Looper is difficult to Use higher rate for severe infes	cations per crop. as ovicidal and larvicion control. Do not apply		
Pears	Green Fruitworm Oblique banded Leafroller	1 1/2 - 3*	7	48 hrs
Northeast only	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 2 applications per crop.  * Apply in a minimum of 50 gallons of water per acre.			
Peas (succulent) Including: Pigeon peas Chick peas Garbanzo beans Dwarf peas	Alfalfa Looper Cabbage Looper* Pea Aphid Beet Armyworm Saltmarsh Caterpillar Variegated Cutworm	1 1/2 - 3	1 - Peas 5 - Forage 14 - Hay	48 hrs
Garden peas Green peas English Peas	Alfalfa Caterpillar Armyworm Green Cloverworm	3/4 - 3		
Field peas Edible pod peas	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop .  Do not make more than 6 applications per crop; minimum interval between treatments is 3 days.  * Do not use for Cabbage Loopers in AL & GA.			
Pecans Southeast only	Aphids	1 1/2 - 3	30	48 hrs
	Do not apply more than 21 pints Do not make more than 7 applic		MYL 29LV per acre per crop.	
Peppers Including: Bell Hot	Loopers Beet Armyworm Green Peach Aphid Armyworm Fall Armyworm	1 1/2 – 3	3	48 hrs
Pimentos				1
Pimentos Sweet	Variegated Cutworm	3/4 - 1 1/2		

Pomegranates	Omnivorous Leafroller	3	14	48 hrs
	Do not apply more than 6 pints of RO Do not make more than 2 application		MYL 29LV per acre per crop.	
Potato	Tuberworm* Loopers Aphids Beet Armyworm Leafhoppers Fall Armyworm	1 1/2 - 3	6	48 hrs
	Variegated Cutworm Flea Beetles	1 1/2		
	Do not apply more than 15 pints of F Do not make more than 10 application. Chemigation - ROTAM METHOMYL chemigation. For best results, use the 29LV. Apply in 0.1 to 0.2 inches of with more information.  *Repeat applications of ROTAM ME as needed, to control tuber worm poinsecticides with different modes of a larval populations as low as possible damage to the tubers. Failure to add senescence or vine kill increases the	ons per crop.  29LVmay be a le highest listed vater per acre.  THOMYL 29LV pulations. An a action may be re exprise prior to harves	applied by overhead sprinkler of rate of ROTAM METHOMYL See CHEMIGATION section for on a 5-7 day schedule, or longer application schedule of effective needed to keep foliar feeding st to reduce the risk of larval tuberworm larvae prior to crop	
Rye	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs
	Do not apply more than 6 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.  Chemigation - ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.  *Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.  **Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought).  Applications on Russian wheat aphid need to begin when aphid population is low (<10 adults per stem).			
Sorghum	Sorghum Webworm	1 1/2*	14**	48 hrs
Including: Sudangrass (except Sweet Sorghum)	Sorghum MidgeApply when 50% bloom and 3-5 days later if needed. Fall Armyworm (Budworm) Beet Armyworm Corn Earworm Armyworm	3/4 1 1/2*		

	Do not apply more than 3 pints of R Do not make more than 2 application * Minimum of 10 gallons per acre by ** Do not apply within 14 days of fe	ons per crop. y ground or 2 ga	allons per acre by air.	
Soybeans	Green Cloverworm Velvetbean Caterpillar Mexican Bean Beetle Corn Earworm - Light to moderate Infestations	2/5 - 3/4 (see Insect Predator section)	14 - Soybeans 3 - Forage 12 - Hay	48 hrs
	Corn Earworm -  Moderate to severe infestations	3/4 – 1 1/2		
	Soybean Aphid	1/2 – 1		
	Beet Armyworm Salt Marsh Caterpillar Bean Leaf Beetle Fall Armyworm Thrips Silver Spotted Skipper - Light to moderate infestations	3/4 – 1		
	Silver Spotted Skipper - 1 - 1 1/2  Moderate to severe infestations			
	Do not apply more than 4.5 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 3 applications per crop.			
Spinach	Alfalfa Looper Cabbage Looper Beet Armyworm Fall Armyworm	1 1/2 - 3	7	48 hrs
	Variegated Cutworm 1 1/2  Do not apply when minimum daily temp. is 32° F, or lower.  Do not apply to seedlings less than 3" diameter.  Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 8 applications per crop.			
Sugar Beet	Beet Webworm Flea Beetles Carrion Beetles Beet Armyworm* Aphids* Western Yellowstripe Armyworm*	3/4 - 3	30 - Tops 21- Roots	48 hrs
	Variegated Cutworm	1 1/2		
	Do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 10 applications per crop.  *Chemigation - ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation to control beet armyworm, aphids and western yellowstriped armyworm.  For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.			
Summer Squash* Including:	Looper Tobacco Budworm	1 1/2 - 3	1 1/2 pt 1 day over 1 1/2 pt 3 days	48 hrs

Crookneck squash Straightneck squash Scallop squash Vegetable marrow Spaghetti squash Hyotan Cucuzza Hechima Chinese okra Bitter melon Balsam pear Balsam apple Chinese		lications per crop. eae) family that are c	onsumed when immature, 100%		
Cucumber	of the fruit is edible cooked or raw, once picked cannot be stored, has a soft rind which is easily penetrated, and if seeds were harvested they would not germinate.				
Tangelo, Tangerine CA, AZ & HI only	Thrips Western Tussock Moth Orange Tortrix, Beet Armyworm	1 1/2 - 3	1	72 hrs	
. ****	Do not apply more than 9 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.				
Tobacco (Except shade)	Flea Beetle Hornworm	3/4 - 1 1/2	5 - Flue cured 14 - Air or fire cured	48 hrs	
	Loopers Aphids Tobacco Budworm Fall Armyworm	1 1/2			
	Do not apply more than 7.5 pint Do not make more than 5 applic		MYL 29LV per acre per crop.		
Tomato (Including Tomatillos*)	Tomato Fruitworm Aphids Hornworm Loopers Beet Armyworm Southern Armyworm Pinworm Armyworm Fall Armyworm	1 1/2 - 3	1	48 hrs	
	Variegated Cutworm	1 1/2		1	
	Do not apply more than 21 pints of ROTAM METHOMYL 29LV per acre per crop. Do not make more than 16 applications per crop.  * For tomatillos do not apply more than 15 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 5 applications per crop.				
Turf (For use on sod farms only)	Sod Webworm (after application, sprinkle irrigate for 15 minutes)	3 (1.1 fl. ozs. per 1000 sq. ft.)		48 hrs	
	Do not apply more than 12 pints of ROTAM METHOMYL 29LV per acre per crop.  Do not make more than 4 applications per crop.  Do not graze or feed.				
Wheat	Armyworms Cereal Leaf Beetle* Aphids**	3/4 – 1 1/2	7	48 hrs	

Do not appear more than 6 pints of ROTAM METHOMN 9LV per acre per crop. Do not make more than 4 applications per crop.

Chemigation: ROTAM METHOMYL 29LV may be applied by overhead sprinkler chemigation. For best results, use the highest listed rate of ROTAM METHOMYL 29LV. Apply in 0.1 to 0.2 inches of water per acre. See CHEMIGATION section for more information.

\*Cereal leaf beetle: ROTAM METHOMYL 29LV can provide contact ovicidal effect on cereal leaf beetle eggs when applied according to label directions. Application should be timed to correspond with the appearance of newly laid eggs or in anticipation of egg hatch to achieve maximum ovicidal effect. Use on this pest stage (egg) is not currently registered in California.

\*\*Aphids: For aphid control, crop must be actively growing and not under stress from adverse environmental conditions (such as, extreme temperatures or drought). Applications on Russian wheat aphid need to begin when aphid population is low (<10 adults per stem).

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage: Store in a tightly closed container in a cool, dry place.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal (Nonrefillable container 5 gallons or less): Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container: Refill this container with Rotam Methomyl 29LV containing methomyl only. Do not reuse this container for any other purpose. Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Use standard industry practices for cleaning refillable containers.

**Spills:** For minor spills, leaks, etc., follow precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

In the event of a major spill, fire or other emergency, call CHEMTREC Day or Night, 1-800-424-9300.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Rotam Agrochemical Company Limited or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Rotam Agrochemical Company Limited and Seller harmless for any claims relating to such factors.

Rotam Agrochemical Company Limited warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Rotam Agrochemical Company Limited, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW ROTAM LTD MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, Rotam Agrochemical Company Limited or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM AGROCHEMICAL COMPANY LIMITED AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ROTAM AGROCHEMICAL COMPANY LIMITED OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Rotam Agrochemical Company Limited and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Rotam Agrochemical Company Limited.

Manufactured by: 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

Registered: [TBA]

## RESTRICTED USE PESTICIDE

**Due to high Acute Toxicity to Humans** 

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification. Direct supervision for this product requires the Certified Applicator to review federal and supplemental label instructions with all personnel prior to application, mixing, loading, repair or cleaning of application equipment.

GROUP 1A INSECTICIDE

# Rotam Methomyl 29LV Insecticide

Water Soluble Liquid Contains 2.4 lbs. active ingredient p	er gallon	
Active Ingredient	By Weight	
Methomyl		
(S-methyl-N-[(methylcarbamoyl) oxy]thioacetimidate)	29%	
Inert Ingredients	71%	
TOTAL	100%	
PA Reg. No. 83100-TBA		st. No.: TE

Refer to inside label booklet for Directions for Use.

# KEEP OUT OF REACH OF CHILDREN WARNING

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

#### **FIRST AID**

#### (N-Methyl Carbamate insecticide)

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

# ATROPINE IS AN ANTIDOTE -- SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If poisoning symptoms appear (see POISONING SYMPTOMS), get medical attention.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING.** FATAL IF SWALLOWED. CONTAINS METHANOL; MAY CAUSE BLINDNESS. CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE.

Do not get in eyes or on clothing. Wear protective eyewear. Harmful if inhaled or absorbed through skin. Avoid contact with skin or breathing spray mist. Wash hands thoroughly with soap and water after handling.

POISONING SYMPTOMS — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section on the ROTAM METHOMYL 29LV label and seek medical attention at once.

#### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. TREATMENT — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to ROTAM METHOMYL 29LV alone. However, for exposure to combinations of ROTAM METHOMY L29LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.



This pesticide is toxic to fish, aquatic invertebrates, and mammals. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

#### PHYSICAL AND CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Keep container closed. Use with adequate ventilation.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage: Store in a tightly closed container in a cool, dry place.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal (Nonrefillable container 5 gallons or less): Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to

pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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Manufactured by: Rotam Agrochemical Company Ltd. 7/F Cheung Tat Centre 18 Cheung Lee Street Chai Wan, Hong Kong 1-866-927-6826

# Net Contents Gallons

## ISB'S Front-end PRIA Completeness Screen Draft 3; 10/25/07

EPA	Receipt Date: 9/14/10	EPA Reg. Number:	3100-	ET	
	Check List Item		Yes	No	N/A
1	Has the PRIA Fee been Paid; is a copy of the check or Pay.gov receipt included in the Submission Package?				
2	Is an Application Form (EPA Form 8570-1) Included in the Submission Package, is it completely filled out and signed including package type?		/		
3	Is a Confidential Statement of Formula (EPA Form 8570-29) Included in the Submission Package, is it completely filled out and signed (boxes 1-21)?				
4	Is a Formulator's Exemption Statement (EPA Form 8570-27) Included in the Submission Package?				
5	Is a Certification with Respect to Citation of Data (EPA Form 8570-34) Included in the Submission Package?				
6	Is a Data Matrix (EPA Form 8570-35) Included in the Submission Package?		~		
7	Is a Label Included in the Submission	Package?	1		
8	Are Data Included in the Submission	Package?	/		
9	Is the Submission an Amendment?			1	